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SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 1 Washington, D. C. January 8, 1940

FERDINAND AUGUSTUS SILCOX

By Earle H. Clapp

"His work as Chief Forester has been magnificent. He has been the man of the hour, successful as a leader on account of his high intelligence, executive ability, ideals, and courage. I join the great group which mourns his death." — From a letter by Henry S. Graves.

"F. A. Silcox, Chief of the United States Forest Service since 1933, was the very paragon of a public servant. . . . he never demeaned his service as a Government official by regarding it merely as a means of livelihood or as a stepping stone . . . that meant the abandonment, even in part, of the task of saving America's dwindling forests. To that task he had consecrated himself. And he performed it with high devotion and unflagging energy."
—From an editorial in the Washington Post.

"He believed that the forests should be used but objected to their being wasted. . . . with his own eyes he had seen the havoc which a merciless policy can effect. A moral indignation rose in his soul, and he launched a campaign of correction whose results already are apparent.

"But Major Silcox was never a fanatic. If on occasion he 'laid down the law' . . . he took pains to be certain that he was right before he spoke. . . . He was an American who could ill be spared in an age when vision and a genius for achievement are wanted."
—From the Washington Star.

These are sincere tributes, and deserved ones, but among my most precious memories of our late Chief are the passionate interest he had in the human side of forestry, and his fearlessness.

Among his other qualities Sil was a technician. He knew how to work with land, and forage, and trees. But he was never blinded by them, as too many technicians too often are. He never considered them an end in themselves. "As trustees," he said in his 1937 Christmas message to all of us, "we must manage the Nation's forests so they may become tools - and better tools - in the service of mankind."

No one can forget Mr. Silcox's personality, the genuine interest he had in people; his kindly and helpful and realistic understanding of everyday problems; the capacity he had for winning and holding loyalty and enthusiasm; his innate fairness. These were qualities that endeared him to all who worked with and for him. But Mr. Silcox's determination to get and face the facts, his fearlessness in stating them, and his ability to do so with such fairness and dignity as to win respect in low places and in high ones: -- this is a precious heritage left to us by a beloved Chief.

My hope is that the Forest Service will guard and cherish this heritage; that it will guide us, as public servants, so that we may be wholly worthy of the high trust that is ours.

THIRTY YEARS OF TREE GROWTH RECORDS

By Thornton T. Munger, Pacific Northwest Forest Expt. Sta.

Thirty years ago I established some permanent sample plots in a 54-year-old stand on the Umpqua, later Cascade, and now Willamette National Forest. Recently I had the interesting experience of joining in the remeasurement of these plots. In 1910 I journeyed to them from Portland by train, horseback, rowboat, and on foot. This year I went to them in a fraction of the time by automobile.

The three plots are located in a representative even-aged stand of pure Douglas fir, several thousand acres in extent, that followed a fire which wiped out the virgin forest about 85 years ago. The land is Site Quality II, which means a little better than average for the region at large. The natural stocking was not particularly dense, partly because of a fire that thinned out the stand when it was about 35 years old.

In the 30 seasons when the forest has grown from 54 to 84 years of age there have been many changes. The number of living trees per acre has dropped in the struggle for existence from 197 to 120. The survivors have made good growth; the biggest tree then was 24.8 inches in diameter, now 31.3. The diameter of the dominant and codominant trees has increased from 18.7 to 22.3 inches. The average volume per acre has jumped from 33,367 to 71,585 board feet, Scribner rule, which indicates a growth rate for the period of 1,274 feet, board measure, gross scale per acre per year.

Though understocked in 1910 in relation to the "normal" yield tables (published in U.S.D.A. Tech. Bul. 201) this forest has gradually approached normality according to predictions and already one of the plots is practically 100 percent "normal" in basal area and volume.

This forest has had its share of battles with the elements and disease. A fire in the early nineties, an ice storm in 1888, a colony of bark-beetles the last 7 or 8 years, and now some fungi have all taken their toll. But in spite of these inevitable ravages the forest has made to date a mean annual growth per acre of 161 cubic feet or 852 board feet, Scribner rule. Moreover, the mean annual increment is still increasing.

In 1910 the trees were bristling with dead branches. They still carry the stubs of these branches almost to the ground. But few trees are producing knot-free wood and by actual measurement this year the average clear length of all sizes and classes of trees was only 5.4 feet.

This stand with over 70,000 board feet per acre (gross scale) has more sound saw timber than nearby 3- or 4-hundred-year-old virgin stands, which are decrepit with defects and conk rot. This 84-year-old stand is still earning a high rate of interest in quality and quantity production. Its dense and unbroken canopy and freedom from snags make it a relatively easy forest to protect from fire. If a market could be found for piling, mine timber, or small saw timber, it would be good forestry to give it a stand improvement thinning; in fact this should have been done 20 years ago.

FACTS AND FIGURES ABOUT COUNTY PLANNING

By D. A. FitzGerald, Bureau of Agricultural Economics

How far has county land use planning progressed? How many counties have been selected for "intensive" work? What counties are developing "unified" programs? Have any recommendations made by county planning committees been translated into action?

The Bureau of Agricultural Economics, since being assigned the role of central planning agency for the Department of Agriculture by the Secretary's order of October 6, 1939, has received many questions such as these. The Bureau welcomes these questions as evidence of a keen interest in the land-use planning program, and hopes that the following facts and figures about county planning's progress to date will serve as a partial answer.

In cooperation with the Extension Service and the Land Grant Colleges, the Bureau has been developing agricultural planning organizations and procedures designed to blend the practical knowledge and experiences of farmers with the technical information of research specialists and the judgments and decisions of administrators.

State Land Use Planning Committees, consisting of representatives of State and Federal agencies having responsibility for the management of land-use programs in the States and of a majority of farmers representing important type-of-farming areas, give direction to land-use planning in the States. State BAE representatives report the complete organization of State committees in 33 States, with five additional States having submitted a list of the representatives of the various agencies. State committees are in the process of organization in other States.

In the counties the planning work is conducted through County Land Use Planning Committees. These committees are composed of at least 10 farm or ranch men and women, including forest owners, and representatives of each State and Federal agency administering land-use programs in the county. "Intensive" planning work - involving area mapping and classification and the formulation of immediate and longtime land-use plans and adjustment goals by the county committees - has been inaugurated in about 704 counties in 42 States, or in nearly 25 percent of the counties in the country.

Most recent figures show that the number of counties in which intensive planning has been inaugurated prior to July 1, 1939 and in which this phase of planning has been completed, or will be completed within the current fiscal year, is 317. The number of counties in which intensive planning has been started since July 1, 1939, or in which it will be started during the current fiscal year, is about 387.

"Unified programs" will be developed in at least one county in each State for administration during 1940. These are the counties in which it is expected that action agencies will be able to reflect constructive recommendations of the county committees in their programs for 1940, and where a major effort at reconciling local, State, and Federal programs will be made next year.

Thus far 44 counties in 40 States have been selected for the development of unified programs, and one additional State has selected three counties from which its final choice of a unified county will be made. These unified counties are: Lee, Alabama; Yuma, Arizona; Yell, Arkansas; Yuba, California; Windham and New London, Connecticut; Sussex, Delaware; Columbia, Florida; Greene, Georgia; Washington, Idaho; Adair, Iowa; Nemaha, Kansas; Lincoln, Louisiana; Penobscot, Maine; Kent, Maryland; Worcester and Essex, Massachusetts; Carlton, Minnesota; Covington, Mississippi; Teton, Montana; Boone, Nebraska; Lyon, Nevada; Coos and Belknap, New Hampshire; Atlantic, New Jersey; Quay, New Mexico; Wyoming, New York; Caswell, North Carolina; Ward, North Dakota; Ross, Ohio; Okfuskee, Oklahoma; Coos, Oregon; Washington, Rhode Island; Newberry, South Carolina; Hand, South Dakota; Young and Kaufman, Texas; Box Elder, Utah; Chittenden, Vermont; Culpeper, Virginia; Spokane, Washington; Lewis, West Virginia; Barron, Wisconsin; Platte, Wyoming; and one of the following: St. Charles, Boone, or Macon, Missouri.

And already real progress is evident in the translation of county planning efforts into action.

In Quay County, New Mexico, for example, the accomplishments to date include: (1) plans under way for the establishment of a wildlife management area in cooperation with the State Game Department; (2) F.S.A. has increased the number of rehabilitation grants, taking farmers off W.P.A. rolls and affording them a better opportunity to carry on farming operations; (3) two Soil Conservation Districts in the county have incorporated the soil conservation practices recommended by the committee into their work plans; (4) County and State Highway Department and the Bureau of Public Roads have accepted the recommendations of the committee for the improvement of the secondary road system.

In line with planning activity, a soil conservation district has been set up in Box Elder County, Utah, and the Forest Service has expanded the boundaries of the Cache National Forest.

In Childress County, Texas, the Prairie States Forestry Project planting areas are being relocated in accordance with the recommendations of the county planning committee. This county is but one of many in which the work of the county planning committee is being used in connection with the Prairie States Forestry Project.

In Beaver County, Oklahoma, the Farm Security Administration uses the plan for that county in discouraging continued occupancy of poor land areas, and in building the individual farm-management plans which form the basis of its rehabilitation loans. State and county governments also use these plans.

Upon the recommendations of the county planning committee, Young County, Texas, has purchased terracing equipment costing more than $6,000 for use on farm land.

Worcester and Wicomico Counties, in Maryland, have each agreed to appropriate $10,000 for farm drainage work along the Pocomoke River watershed, as a result of study of local drainage needs by the planning committees in these counties.

In Minnesota, farmer backing for a rural zoning enabling act was expressed through the planning committees of two Northern Minnesota counties. This was the first time that farmers had asked for such legislation in Minnesota, and the act was passed at the last session of the legislature.

The attitude and interest of farmers in the agricultural land-use planning work are reflected in the reports of their committee meetings. Typical of their comments is the statement of a committee member from the Windham County, Connecticut, who said, "Agricultural planning is so important that we should continue it if we wish to continue in farming."

HOW DO YOU LIKE YOUR WOOD?

By H. D. Cochran, R.2

In the November issue of the "Six Twenty Six" there is an interesting discussion of sawdust building bricks, showing that the bricks are fireproof, will not break or expand, but will float. (The fact that they are 99.4 percent pure does not appear in this instance to be important.) Apparently they are less expensive than other building materials.

Recently a Nazi youth addressing a group of business men in Denver called attention to economies practiced in Germany and mentioned the fact that his suit was made of wood; also his shirt. Both looked very much like the ordinary clothing worn in this country.

Again, talking on the same subject, namely present conditions in Germany, a recently returned member of the Diplomatic Service called attention to recent advances in the utilization of wood in Germany. A very successful soap is now manufactured, and, through research, efforts are being made to develop fats from wood that will be suitable for use in foods.

Reports have been received concerning the development of motor fuels and other uses covering a range that is surprising to anyone who does not keep in close touch with these rapid advances. Just how far will wood conversion go?

CALL OF THE WILD

The following was scrawled on a postal card addressed to "Mr. Presidend Rosevolt". It was referred to the Forest Service for appropriate attention.

"Are there any opening for me to be a ranger if there are please let me have a job out here in U. S. Something and if you will would you please send me 2 pearl handle guns on each side and hoster for them and a ranger's bage ranger's hat, pants, shurts and boots and I will pay you for them later and a horse. I am 16 years of age so please."

FORESTERS DO A JOB

(From the "Milwaukee Journal," November 16, 1939)

The Federal Forest Service, which now operates extensively in Wisconsin and maintains midwestern regional headquarters in Milwaukee, seems to have done a real job of timber salvaging in the New England States.

As even midwesterners will remember, a hurricane hit the northeastern American coast in September, 1938. It cut a swath through the New England forests, leaving in its wake nearly 3,000,000,000 feet of "down timber" subject to rot and insect attack unless hurriedly trimmed and piled.

The Forest Service was called upon to step into this mess, salvage sound logs from among the tangles of debris, and then arrange carefully to handle and market those logs, without too much loss to owners and without demoralizing the market.

Now a $14,400,000 contract for the purchase of 600,000,000 board feet of that timber has been signed, with a co-operative group of timber wholesalers participating with the Forest Service.

This is but one of the culminating details in a salvage operation that began shortly after the hurricane and has been under way ever since.

Wisconsin folks who now know something about the Forest Service might consider: That this governmental agency is a regular, not an emergency, branch of government; that it employs many experts; that the foresters "know their stuff"; that they devise practical and economically sound programs.

For these reasons they did not flounder about in the New England forests, inexpertly trying to get a salvage operation under way. They knew how to tackle the job, as they know how to tackle their jobs in Wisconsin and in others of the Lake States.

To be sure, the Forest Service still is a governmental agency, is something of a bureaucracy and is, too, something of a red tape bound and hampered aggregation of essentially capable men.

In its operations are faults and errors, and some of its endeavors are woefully "smeared" by other agencies or political influences. But if we would have big tasks done by branches of government, incidentally employing many people, such branches as the Forest Service are most likely to yield real results and leave us with a feeling of satisfaction, instead of doubt or dismay.

VANISHING SPECIES AREAS

By John H. Hatton, Washington

To date four Vanishing Species Areas have been set up under Regulation T-9(I), approved by the Secretary, January 13, 1937. They are as follows:

1. Sisquoc Sanctuary for the protection of California Condor, Los Padres National Forest, Region 5, 1300 acres, approved June 10, 1937. It is estimated that there are but 50

of these birds remaining, which fact well qualifies it for such protection as can be given under the Vanishing Species Regulation.

2. Big Craggy Botanical Area, Siskiyou National Forest, Region 6, approved June 10, 1938, 4900 acres, for the protection of Kaliopsis leachiana. This is a monotypic genus, a relict of the tertiary age and one of the three oldest genera in the group Ericaceae. L. F. Henderson of Oregon Agricultural College first published on this plant as Rhododendron leachianum. It is an attractive plant horticulturally as well as botanically and has excited keen interest among amateur and professional rock gardeners.

3. Tumwater Botanical Area, Wenatchee National Forest, Region 6, approved June 10, 1938, 1040 acres, for the protection of Lewisia tweedyi, a rare plant found only in a few places in the United States. This plant is also sought by many people for rock gardens, and garden clubs are interested in seeing it protected.

4. Meadow Creek Botanical Area, Fremont National Forest, Region 6, approved November 30, 1939, 50 acres, for the protection of a species of Camas, Quamasia quamash. This plant, formerly common on wet meadows throughout Oregon, has been tremendously reduced, chiefly by cultivation and drainage. It was a staple plant food of old Indian tribes in early days. Wars were fought over possession of extensive camas patches. The Whites learned to eat the plant from the Indians. It is also an attractive plant horticulturally as well as botanically.

THE SOCIAL OUTLOOK IN SCIENCE

(From a Review by Harold Ward in "The New Republic" for December 6, 1939)

Two volumes, both by top-ranking British scientists, emphasize the increasing social awareness of scientific literature within the past few years. In his aptly named "Science for the Citizen," published last year (Knopf, $5), Lancelot Hogben gives us an encyclopedic popular review of scientific knowledge in terms of its socio-economic backgrounds, concluding with a persuasive appeal for a "new social contract" based upon the somewhat mystical workings of what the author calls "scientific humanism." Equally vigorous but far more tough-minded, J. D. Bernal, in "The Social Function of Science" (Macmillan, $3.50), exposes the terrible contradictions between "what science does" in a world of savagely belligerent economic systems and "what science could do" if social planning were to become more than the pious shibboleth of mutually distrustful economists, engineers, philosophers, and humanitarians.

Bridging the gap between Hogben's idealism and Bernal's Marxist approach, is Professor Hyman Levy, another of England's gifted insurgents against the orthodox view of science as above the battle. In "Modern Science" (Knopf, $5), Levy presents us with what is, in effect, a closely reasoned 700-page manifesto proclaiming the essential unity between scientific ideas, technical discoveries and social development. Superficially, his book is a stimulating and masterly account of what we know about the external world and of the various mathematical and technical procedures by which that knowledge has been obtained. But as the reader digs in—not an easy matter, by any means—he becomes aware that his whole attitude toward science is being vitalized by the author's subtle linking of the most abstruse concepts with their technical equivalents, their industrial, economic and political setting, to reveal a dialectical continuum whose final term is Man in Society.

The secret of Levy's remarkable achievement lies partly in his ability to interpret the fundamental ideas of physical science, not in terms of absolute laws valid to the last electron, but of statistical regularities allowing for a margin of the "unpredictable"-- not "freedom" in the sense intended by such idealists as Jeans, Whitehead and Eddington. But, unlike many other scientists who are equally hard-headed, Levy utilizes the powerful instrument of statistical regularity in natural phenomena to demonstrate the implicit dialectic of all scientific procedure, and to plead for its conscious application by the entire community to the bewildering but by no means hopeless contradictions now running amok on the social level.

In this he is in substantial accord not only with Bernal but also with J. B. S. Haldane, P. M. S. Blackett, Marcel Prenant and a growing band of the younger scientists now faced with war and turmoil over half the world. These men would gladly subscribe to Levy's contention--expressed in the thought-provoking Epilogue of his fine book--that "Science is not the prerogative of any one class or of any one competitive group," and that if Science is to get anywhere Society must stop drifting nowhere.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

BUHLER, E. O. A new way to a community forest. Jour. Forestry 37(11): 901-902. Nov. 1939.

CHAIKEN, L. E. The approach of loblolly and Virginia pine stands toward normal stocking. tables, charts. "Literature cited": p. 871. Jour. Forestry 37(11): 866-871. Nov. 1939.

CRONEMILLER, F. P. How big is your deer? Pacific Sportsman 20(3): 25. Sept. 1939.

CURRAN, C. E. Wood pulp, by Julius Grant. 209p. Chronica botanica company, Leiden (Holland), and G. E. Stechert, New York. 1938. (Book review). Jour. Forestry 37(11): 907-908. Nov. 1939.

_______Forest products research in the pulping of western woods. Pac. Pulp & Paper Indus. 13(6): 28-29. June 1939.

FORBES, R. D. Sagas of the evergreens, by Frank H. Lamb. 364p. illus. W. W. Norton and co., inc. New York. 1939. (Book review). Jour. Forestry 37(11): 908-909. Nov. 1939.

FOWELLS, H. A., and ARNOLD, R. K. Hardware cloth seed-spot screens reduce high surface soil temperatures. Jour. Forestry 37(10): 821-822. Oct. 1939.

FRANK, BERNARD, and HUBERMAN, M. A. Correspondence. (Letter to Henry Schmitz). Jour. Forestry 37(10): 833-834. Oct. 1939.

GEMMER, E. W. Reproduction of the loblolly pine. Naval Stores Rev. 49(26): 13. Sept. 23, 1939.

GEVORKIANTZ, S. R. Elementary forest mensuration, by M. R. K. Jerram. With a chapter on the Measurement of forests, by R. Bourne. 124p. illus. Thomas Murby and co., London, and Nordemann publishing co., New York. 1939. (Book review). Jour. Forestry 37(11): 907. Nov. 1939.

GROSS, L. S., and HUBERMAN, M. A. The seed makes the tree. illus. Amer. Forests 45(10): 498-501, 523. Oct. 1939.

HALL, A. G. Sechrist's foresters' field manual, by W. C. Sechrist. 128p. The Craft press, inc., Fayetteville, Pa. 1939. (Book review). Jour. Forestry 37(10): 831. Oct. 1939.

HORNIBROOK, E. M. Preliminary yield tables for selectively cut stands of ponderosa pine in the Black Hills. table, charts. Jour. Forestry 37(10): 807-812. Oct. 1939.

HUBERMAN, M. A. An outline of forestry, by Thomas Thomson and M. R. K. Jerram. 208p. plate, figs. Thomas Murby and co., London, and Nordemann publishing co., inc., New York. (Book review). Jour. Forestry 37(10): 824. Oct. 1939.

KAUTZ, L. G., and LIMING, F. G. Notes on the 1937 and 1938 acorn crops in the Missouri Ozarks. Jour. Forestry 37(11): 904. Nov. 1939.

KOLBE, E. L. Burning ponderosa pine snags by the base-fire method. illus. Jour. Forestry 37(11): 894-896. Nov. 1939.

MATHEWSON, J. S. The seasoning of wood. tables, diagr. Indus. Arts and Vocational Ed. 28(7): 265-269. Sept. 1939.

MATTOON, W. R. Dedication address to Henry E. Hardtner. Jour. Forestry 37(10): 761-762.. Oct. 1939.

MEGINNIS, H. G. Soil collecting trenches as substitutes for temporary check dams in reforesting gullies. illus. Jour. Forestry 37(10): 764-769. Oct. 1939.

MINCKLER, L. S. The block-line method of plantation examination. table, diagr. Jour. Forestry 37(11): 872-875. Nov. 1939.

MORRIS, W. G. Coordinating plans for fire protection facilities. "Literature cited": p. 865. Jour. Forestry 37(11): 861-865. Nov. 1939.

NELSON, R. W. Controlled burning at $40 per acre; is it socially justifiable? Jour. Forestry 37(10): 815-817. Oct. 1939.

RABER, ORAN. Bioclimatics; A science of life and climate relations, by A. D. Hopkins. 188p. U. S. Department of agriculture, Misc. pub. 280. (Book review). Ecology 20(3): 415-416. July 1939.

SEBORG, C. O., SIMMONDS, F. A., and BAIRD, P. R. Properties of wet fiber mats: relation of recovery from compressive deformation to sheet properties. illus., charts. Paper Trade Jour. 109(8): 35-42. Aug. 24, 1939.

SILCOX, F. A. A great project in conservation deserving widespread attention. Nat'l. Grange Month. 36(10): 3, 13, 23. Oct. 1939.

SMITH, C. G. The effect of pulpwood purchases on the permanence of Southern mills. illus. South. Pulp and Paper Jour. 2(4): 15-16. Sept. 1939.

SPARHAWK, W. N. German-English science dictionary for students in the agricultural, biological and physical sciences, by Louis de Vries. 473p. McGraw-Hill co., New York and London. 1939. (Book review). Jour. Forestry 37(11): 909-910. Nov. 1939.

_______Das Pflanzenleben der Ostalpen (The plant life of the eastern Alps), by Rudolf Scharfetter. 419p. map, figs. Franz Deuticke, Vienna and Leipsig. 1938. (Book review). Jour. Forestry 37(10): 827. Oct. 1939.

_______La Revista Italiana (Italian forestry review), by Augusto Agostinai. Vol. 1, no. 1, March 1939. 68p. illus. Institute Poligrafico dello Stato, Liberia dello Stato, Rome. (Book review). Jour. Forestry 37(10): 826. Oct. 1939.

SPENCER, J. W. Present day land utilization problems. Jour. Forestry 37(10): 772-774. Oct. 1939.

SPERLING, HARRY. Alaska offers recreational variety. (In Juneau. Sports fishing club. Annual year book and sportsmen's directory. 4: 38-39. 1939). In Clipping file under "Recreation. Alaska".

STAHELIN, R. A slide rule method as a substitute for straight axis alinement charts. table, graph. Jour. Forestry 37(10): 775-777. Oct. 1939.

TALBOT, H. W., BISWELL, H. H., and HORMAY, A. L. Fluctuations in the annual vegetation in California. illus., tables, map. Ecology 20(3): 394-402. July 1939.

TAYLOR, R. F. The application of a tree classification in marking lodgepole pine for selection cutting. diagr. charts. "Literature cited": P. 782. Jour. Forestry 37(10): 777-782. Oct. 1939.

WINTERS, R. K. In memoriam - Henry E. Hardtner. Jour. Forestry 37(10): 763-764. Oct. 1939.
WOOD, O. M. Reproduction of shortleaf pine following mechanical treatment of the seedbed. tables. Jour. Forestry 37(10): 813-814. Oct. 1939.
ZON, RAPHAEL. The human side of land use. (Condensed from Address before Society of American Foresters at Milwaukee). Conservation 5(5): 26-28. Sept./Oct. 1939.

IN MEMORIAM

We beg to advise you and wish to state
That yours has arrived of recent date.
We have it before us, its contents are noted;
Our Mr. Smith tells us the price he has quoted.
Attached you will find, as per your request,
The sample you wanted, and we would suggest
Regarding the matter and due to the fact
That up to this moment your order we've lacked
We hope that you will not delay it unduly
And we beg to remain, ever yours very truly.

Thus the Caterpillar Tractor Co. kicks off in a smart new booklet on "Better Letters." It's intended for all the Caterpillar employees who dictate or write letters and is designed to help them do a more effective job of it.

Much of its content, of course, has to do with Caterpillar standards of practice, but the first part of the booklet takes a swing at the tripe that clutters up so many business letters. The opening chorus, already quoted, is an example. That might well be reprinted and pasted up where it can be seen by all the business letter writers of the land. Nothing kills the spirit of a business letter so effectually as the habitual use of the jargon so cleverly woven into these lines. ("Business Week")

THE EDITOR DISCOVERS

The following story, taken from a radio talk prepared by the Farm Security Administration, is an excellent illustration of the growing belief that stable community life in forest areas depends on a close tie-in between forestry and farming, and that forest cooperatives offer a promising means of rehabilitating entire communities in accordance with conservation objectives.

"After years of over-grazing, lessened rainfall and low farm prices, members of a small community in Squaw Valley, Idaho, about forty miles north of Emmett, found themselves on relief with no source of income to supplement their farming operations. In 1935 thirty-six families organized the Ola Self Help Cooperative and made application to the former Resettlement Administration, now Farm Security, for a loan of $1,500 with which to establish a small sawmill to provide supplementary income, lumber to re-house themselves and their livestock, build fences, and to establish a community enterprise that would put them back on their feet. The loan was made in 1936 and the sawmill set up adjacent to the Payette National Forest where the group cuts logs under Forest Service timber permits.

"The effect that this little sawmill has had on the morale of the community is amazing. Struggling against almost insurmountable odds, members of the service have built two and one-half miles of truck road from the sawmill into the timber with pick and shovel. They have all the orders for both rough and finished lumber that they can fill and in addition many of the families are building new homes for themselves, as well as barns and other buildings. Often a load of lumber is exchanged for flour, sugar or other necessities for the entire group. Each family has an ample garden and they produce all the food needed with the exception of a few staples.

"These families are proud of the change which they have been able to make in their community. The school district subscribed to a book club and has built up a small library which is available to all members of the community.

"Although farming is their principal occupation, they are able to keep the mill running most of the time. Members work in the sawmill when not busy on their farms, receiving as compensation lumber or food rather than cash. They have met all the payments on their loan and are planning for the future when they can build a community house for recreational and social activities. Through community effort they hope to be able to have electricity in their homes before long. All the new houses are being wired so that when the power line is extended it will only be necessary to hook on. The people hope to expand their operations to provide more employment so that new families can settle in the valley and the school facilities for their children can be improved."

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The following extract is from a recent radio inspection memorandum:

"The most significant statement made was that the Klamath N.F. used ultra-high frequency exclusively during the 1939 fire season. In view of the fact that the Klamath forest embraces an extremely rugged area the satisfactory use of ultra-high frequency only provides rather definite evidence that proper planning, personal training, technical aid in maintenance, and an impartial attitude can produce a very workable communication system without the use of frequencies in the range of 3000 kc."

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"Tahoe Tales, '39," last year's Annual gotten out by CCC Camp F-314, Auburn, California, on the Tahoe National Forest, shows how a little imagination and talent overcome the lack of money in putting out a camp publication.

The text is mimeographed on heavy blue paper, the cover is gold on blue, but the most unusual feature is the use of photographs. Bound in the book are five full pages of photographs. These were apparently printed in camp, and vary from 4 to 12 photos per page. Masks were no doubt cut to accommodate the desired number of negatives, and the whole printed in one exposure. The cover carries a photo of one of the familiar "entering" signs showing the name of the forest. Several pages are left vacant for the owner's own snapshots.

Many an ex-CCC boy will no doubt refer to his copy of "Tahoe Tales, '39" with the same nostalgia as other lads do their college or high school annuals.

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Carl Fred Olsen of the Southern Forest Experiment Station has been awarded the Carnegie Medal in recognition of his quick thinking, resourcefulness, and bravery in attempting to rescue Arland L. MacKinney from drowning on July 4, 1938.

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The City of Cleveland, Ohio, has recently issued a very comprehensive report on its shade trees, showing the total number of street trees of every species in the city, the numbers of diseased and healthy trees, the types of diseases, the number of trees needing pruning, removal and other attention, and information as to their relative age. The data for the report were collected by the City's Department of Parks and Public Property, as a WPA project. The narrative of the report was written by Dr. Arthur B. Williams, Ecologist of the Cleveland Museum of Natural History. A copy of the report is in the Washington Office Library.

The report shows that the City of Cleveland had in August, 1939, a total of 118,146 trees on its tree lawns, and that 101,374 plantable lots had no trees whatever; that it had nearly 50,000 maple trees as against 20,000 sycamores and 20,000 elms, but only 156 mulberry trees, 127 sumacs, and 110 willows.

LAST HERD OF BRITISH WILD CATTLE

Britain's last herd of wild cattle is in danger of extinction unless an appeal for funds, issued by the Earl of Tankerville, meets with adequate response. The upkeep is put at $1500 a year.

In 1932 (Jour. Mamm., vol. 13, p. 304) the park at Chillingham Castle in Northumberland was leased to three trustees appointed by the Council of the Zoological Society of London for the purpose of preserving this herd of white cattle.

These cattle, now numbering 44, are kept in a park enclosed by a high wall, which, says a writer in The London Daily Telegraph, was erected in the middle of the 13th century. The history of this herd goes back at least 1100 years. The animals are direct descendants of the immense white oxen that roamed the Caledonian forests when Hadrian's legions marched north and threw up the great barrier wall across the neck of Britain, crossing it from sea to sea.

Some scientists contend that the animals are descended from the extinct ox of prehistoric Britain. (Journal of Mammalogy, May, 1939)

DIRECTOR FECHNER DIES

Robert Fechner, Director of the Civilian Conservation Corps since its inception in 1933, died at Walter Reed Hospital, Washington, D. C., on December 31. He had been receiving treatment at the Army medical center for more than a month. His death was attributed to a complication of heart and lung ailments. He was buried in the Arlington National Cemetery. Six CCC enrollees from two camps in the District were the pallbearers.

In a personal letter of sympathy to Mrs. Fechner, the President wrote:

"I have heard with deep personal sorrow of the blow which has been laid so heavily upon you in the death of your devoted husband, who was my faithful friend through many years. Please accept an assurance of heartfelt sympathy in which Mrs. Roosevelt joins.

"As director of the Civilian Conservation Corps, he brought to the public service a great administrative ability, vision, and indefatigable industry. His death is a loss to the C. C. C. and to the Nation."

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 2 Washington, D. C. January 22, 1940

PROPOSED AMENDMENTS FOR GRAZING HANDBOOK

By W. B. Rice, R.4

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U.S. Department of Agriculture

Whenever a range inspection is being made by members of the Washington or Regional offices and the question is raised as to why there is no feed at any given point, the ranger may give any one of the following answers, depending on his own personal preference and his size-up of the inspector:

1. There never was any feed here. (To clinch this point, ranger may quote from the diary of Kit Carson that when he camped there in 1832 he had to tie his horse up all night because there was nothing to eat. Geological immaturity is also a good gag to pull. The country is so new that there has not been sufficient time to form adequate soil.)

2. Prolonged drought. (Produce weather records to show that for the last 15 years average precipitation has been only about 45 percent of normal. If and when the rains come, there will be worlds of feed. All in all, it is just an Act of God. Statement should be accompanied by a shrug of the shoulders indicating helplessness.)

3. Stock driveways. (Thousands of sheep and cattle trail back and forth every year and must have some place to walk in order to get to the range. Unavoidable overuse. Shrug shoulders indicating - What the hell can I do about it?)

4. Separating corral, shearing corral, dipping vat, or water hole just over the hill. (Inspector probably won't go over the hill to look anyway. If he is energetic and may look, don't use this one.)

5. Private land. (Inspector knows that we have no control over private land and also does not know where private lands may be located and probably will not check status.)

6. Game situation. (Vast numbers of big game, over which Forest Service has no control, inhabit the area. No game visible now but counted hundreds yesterday. Working hard with State game department and local associations, making substantial progress.)

7. Mormon crickets. (Seven successive years invaded by Mormon crickets. So thick the ground was black. Odor sickening. Make up some story like having to put on tire chains to get car over roads.)

8. Condition of the Industry. (Terrible Shape. Operators losing $2.00 per head per year as shown by large charts at last twenty annual meetings of the State association. Any reductions would precipitate wholesale bankruptcy. Plans all prepared and on file to make necessary reductions when wool gets up to $1.00 a pound.)

9. Political situation. (Very delicate political situation involved in making reductions. Under present circumstances would be inadvisable to act. Missionary work, however, being systematically carried on to clear the way for reductions to carrying capacity. Be very vague and look around furtively to see if anyone is listening.)

10. Cow bottom. (Unavoidable congregation of cattle along narrow stream bottoms. Merely an infinitesimal part of the range. Feed just out of sight over the hill. Drags the stirrups. Perfectly safe with automobile inspector. He won't walk over the hill to see.)

11. Terrible misuse prior to inclusion in the forest. (This one has snow-white whiskers a yard long, but is still good for new additions.)

12. Mismanagement by predecessor. (Former ranger or supervisor not much of a grazing man. Let things run down. A little risky because predecessor might be superior officer some day.)

13. Range on upgrade. (Argue with inspector. Range looks bad all right, but is improving. Exhibit plans showing that deferred and rotation overgrazing is being practiced.)

14. Wrong time of year. (Inspector should see range earlier in season. Worlds of feed in spring, but has dried up and blown away.)

15. Still have good foundation. (No great damage done. With good foundation present, rapid recovery will take place under proper management (which you are supplying). Hope inspector can return in 25 or 30 years and see the difference.)

16. Rodents. (Bad infestation. Blame Biological Survey for killing coyotes. Rodents eat the roots and cows eat the tops. Perfect biological teamwork to create dust bed. Get inspector confused by computations showing that 186,452 mice minutes equals one cow month, etc. Open discussion on biological balance and inspector may forget what he was talking about.)

The above does not by any means exhaust the list, but will prove useful in most cases. In order to make the handbook complete, suggestions for additions will be appreciated.

AN IDEA HERE?

"An appropriation of $1,400 to finance, in part, the payroll of 15 youths on the NYA rolls as California State forest service workers throughout the winter months was voted by the board of supervisors yesterday.

"The youths, all between the ages of 18 and 25, will be employed in maintenance work at forest stations scattered throughout the San Bernardino valley foothills, said Russell Z. Smith, State Forest Supervisor, who asked the appropriation.

"Normally, the youths are carried on the fire suppression rolls and their wages paid by the State and NYA. There is no provision, however, for carrying the youths during the winter, or so-called off season for fire suppression. All are trained workers, said Mr. Smith, and he desires to keep them on his rolls for service next summer.

"Under the new schedule, the county will pay $15 toward their $21 monthly salary throughout the winter. The youths are willing to work for the low rate, explained Mr. Smith, as their services during the winter will qualify them for higher ratings and, consequently, higher pay during the 1940 fire suppression season.

"The entire force will be employed in repainting lookout stations, rebuilding fire trails and roads or repairing and reconditioning equipment used during the 1939 season." (Clipped from the San Francisco "Sun" of December 12, 1939)

THE EXECUTIVE AND HIS STAFF

(Excerpts from an address by Secretary Wallace at the Joint Session of the American Political Science Association and the Society for Public Administration, at Washington, D. C., December 28, 1939)

Thoughtful men cannot long be associated with government without beginning to ask questions, both as to the technique of administration and the underlying policies with which these techniques must reckon. It is good, therefore, that those in the government service who are most interested in public administration should meet from time to time with the professors and publicists who also are interested. * * *

While we in the United States have not as yet so completely recognized public service as a career as they have in England or France, and while there is undoubtedly great room for improvement, I am nevertheless convinced that nowhere in the world will you find a better group of earnest, hard-working, efficient men and women than those who are engaged in American public service whether it be on the local or the national level. * * *

Government, of course, is largely a bureaucracy which for the most part must follow the customary channels. Most administrators can keep in contact directly, effectively, and continuously, with not more than twenty men. If an administrator is to initiate effectively throughout an organization of thousands of men the impulses which are necessary to meet a new situation, he must do so for the most part through his staff or through the "generals" in his army. Only rarely and by the accident of a special situation can he come in effective contact with the captains, the lieutenants or the privates in the army. Of course at times the special interests of an administrator will lead him to do a certain amount of "spot checking" among the captains and the privates, but it is physically impossible, as well as bad administration, to go so very far in this direction. * * *

One of the chief sources of inefficiency in Washington is the failure to develop for the higher executives sufficiently strong staffs to bring about genuine coordination of the bureaus in the service of broad policy. Contrary to popular impression the bureaus as a rule are genuinely efficient. But oftentimes they are somewhat lacking in the comprehension of their relationship to matters of broad policy. It is here that the staff arm of a department or an office can render unusual service.

It is only recently that the colleges of the country have begun consciously to train men for staff positions. Thus far most of the best staff men in the Federal government have come from within the government itself. Some of the best men I know of had very little formal training beyond high school. I have had some experience with young men who have been formally trained and am much impressed with them. They see clearly, work energetically, and about all they need is the wisdom which comes from experience. I hope, however, the day will never come when the bulk of staff positions are filled by the bright young men from the colleges. The superior men of suitable temperament and background who have long been in government service should also have a chance at staff positions. May we never have a situation where the staff positions of our government are largely filled by men who have formed a mutual admiration society because they came from one institution or small group of institutions. There is no one set of ideas on governmental procedure which will furnish the everlasting answer. Some of the best administrators I know have had no formal training in governmental procedure except that learned from actual experience. Some of the best college men in government service have come from very small colleges. For instance, the late F. A. Silcox, who was one of the finest public servants this government has ever had, graduated from an institution in South Carolina of which few people in this room have ever heard.

In a large sense the qualities of a good staff man, as well as a good administrator, come from his personal life experience as much as from his education. His task is to work with people, for all administration is concerned with decisions and actions by human beings--not with mechanical routines. The staff work of conveying broad policy means acceptance of the human traits of the people involved and the direction of those traits toward their most effective use for the ends of broad policy. A staff man must above all be sensitive to people. He must like human beings. This trait comes from life and not from schooling.

But a staff man must also have breadth of knowledge and understanding. Here , think schooling is important. To understand broad policy, a man must know the social and economic trends that require the policy. He must be acquainted with historical backgrounds and be able to place himself in the line of trends. A good perspective is to be as devoutly encouraged in administration as in drawing. A good staff man must be able to analyze present events in terms of their future implications. In short, he should apply his knowledge realistically to the understanding of things as they are and to how policy should be shaped to adjust to reality. Perhaps this is the real job of any social observer. Certainty it is the job of the staff man. * * *

I am convinced that some of the most useful staff men of the future will be those specializing on Federal-State relationships. A really good man in this field has a value above rubies. He must have in him the utmost of perseverance, good nature, backbone, ingenuity, and wisdom. Such men must be both born and made. We have a few of them in the Department and I cherish them. * * *

Anyone who has had the experience of being a Cabinet officer cannot help being astonished at the extraordinary powers of the machine which he directs. The loyalty of his staff and his bureau chiefs is amazing. But their willingness to carry out his expressed interest is sometimes a little disturbing. Sometimes I ask for a certain set of figures without putting in sufficient qualification and as a result the wheels start grinding and within a few days I get a 50-page memorandum when I desired only a reply by telephone. A few experiences of this sort make a person exceedingly hesitant before pressing the buttons of such a high-powered machine unnecessarily.

In every governmental department there are many thousand people working under the Secretary and his associates. If the Secretary should in a moment of vainglory become so proud as to lose his sense of proportion, the havoc created among the workers would become gravely disturbing to the country. It requires a democratic type of mind, not a dictator, to run one of the government departments most successfully. Fundamentally, the problem is one of coordination and cooperation, while at the same time there is sufficient centralization to iron out decisively from time to time conflicts in policy.

I have referred to the enormous possibilities of centralized power in the hands of an executive who sits at the head of a great government department. It is well to recognize, too, some of the limitations on his power. In the very nature of things he cannot personally handle the millions of work items confronting his department. If he does his job well he organizes his department to handle these things well. If the head does his job well much of his effort is in the direction of enlisting the full dynamic power of his personnel; he causes his people to contribute continually and in every way to the functioning of the agency, not merely to respond to orders. * * *

The very essence of being a good executive is to pick men of integrity who understand your policy objectives. The poorest executives are those who dip too much into details. Failing to see the woods for the trees, they get hopelessly lost, trying to do work which could be done better by someone else. The strength of top executives should be saved for the really important policy questions, for contacts with members of Congress, for public contacts, for coordination with the States, for coordination within the Department, and for coordination with other Departments. This means the Cabinet officer must be willing to delegate authority to men who understand how to blend policy and management on behalf of the General Welfare in a sensible way. I have brought into my office in times past a number of different men to whom I have been willing to delegate authority. Sitting in the office and meeting with a great variety of experiences, they have rapidly developed in wisdom and some of them have gone out to serve successfully very large agencies. * * *

If we look at the size of administration and the need for delegation of authority, and if we look also at the increasing importance of good management in a government which is much more an intimate part of the daily lives of its citizens, we recognize that men are the crucial need.

As I said in the beginning, we have a great many public servants already at work who are reliable, who can see the whole including its parts, who can think consistently of the general welfare as the reason for their being. We need a constant new supply of men who can adequately serve the public in a period of constant adjustment to change. We must look to the teachers to train men in the broad vision, to explain the facts of economic and social change which call for public action, to stimulate faith in the American way of life, to inspire students with an understanding of the dignity of man and the personal values to be obtained from serving the public. We must look to the older men in the public service to inspire the younger men with breadth of vision and knowledge and with a dedication to the public interest. Many of the public servants already on the job are doing this now. I trust that more and more the professional association of civil servants, with the teachers and students of government, in such organizations as this, will develop a tradition of public service in this country which will bring benefits to all citizens as we meet the public problems brought by change.

A CHIEF PASSES

By R. F. Hammatt

Earle Clapp has asked me to set down, for the Bulletin, the circumstances immediately preceding and following the death on December 20, 1939, of the man who had been Chief of the Forest Service since November 15, 1933.

The key to Sil's illness in 1937 (coronary thrombosis hit him at Spartanburg, South Carolina, on Monday, May 17, and he was out of the office for some 5 to 6 months) was the enthusiastic, unsparing way he always gave of his energies. And although in the meantime the heart specialist had pronounced him fit again, this same passion was the underlying cause of the recurrence of his previous trouble - and his death.

In Seattle, on July 10, last, Bill Greeley remarked that the Alaska trip had been good for Silcox - that he looked better than he had for a long time. This was true, but signs of strain were evident by the time the Chief reached Washington. And we know, now, that although he took delight and pride in the repairing of his home, and the remodelling of his kitchen, official worries and strains accumulated and multiplied during November and early December.

On Wednesday, December 13, Silcox came late to the office; remarked that he'd not had an easy night; went about business as usual, including a 2-hour conference of the Agricultural Program Board. He wished me luck, that night, with the Christmas shopping I was to do next day; said he would attend to his on Friday and Saturday, and left - for the last time.

On Friday morning I learned from Mrs. Crocker that Mrs. Silcox had had to call a local doctor Wednesday night; that this doctor had told Sil one of his heart ligaments had been strained; that Sil had attended to certain urgent official business (taken to him from the office) on Thursday, but that a specialist had been called for consultation.

By Friday the specialist had diagnosed the trouble as a recurrence of the 1937 heart trouble, the more serious because of the previous attack, and installed two nurses at home, which Silcox preferred to a hospital.

On Sunday, December 17, nourishment was given intravenously, the number of nurses was increased to 4, the specialist pronounced it a serious illness but gave Sil a 50-50 chance.

On Monday, despite restlessness and severe pain, there were what seemed to us in the office certain encouraging signs.

On Tuesday there was a serious sinking spell. Oxygen was resorted to. Sil rallied, told the nurses to take the damn tent away - that he'd be up and around soon.

Part of Tuesday night was bad. After the nurses came on duty Wednesday morning, they started another intravenous injection. Sil watching them, gave a sudden gasp.

He had gone - easily and without pain.

Telegrams and letters began pouring in from the Regions, from people in all walks of life, and from organizations. The funeral was on Friday, December 22 (Christmas was his natal day) at Wheatley's Chapel in Alexandria. Two Cabinet members and other personal and official friends attended. There were beautiful flowers everywhere.

The ceremony was simple and unostentatious; what Sil - who had expressed the desire that his ashes be strewn in some National Forest - would have liked!

MORE REGARDING THE "FORGOTTEN MEN"

By William S. Brown, Los Padres

Mr. Guthrie's splendid article in the Christmas issue of the Bulletin -- "Forgotten Men" -- will strike a responsive chord in many hearts throughout the National Forests of the West and perhaps for the time at least turn our thoughts away from that other class of "forgotten men" who have been occupying our minds so much recently -- the Forest Guards.

The "forgotten men" of the CCC, however, are not forgotten in any sense of the word among the executives of the National Forests, the Supervisors, District Rangers and other officers whose daily work brings them into personal contact with these CCC foremen. Financially speaking, no "forgetting" has ever been done by the local officers who, day by day and month by month, realize the value of the work performed and the faithful services rendered by this class of employees. One has only to glance at the unit CCC camp allotment of a couple of years ago and that handed down to the field today, coupled with a special financial personnel restriction per camp unit, to realize why Santa Claus had no room in his pack for well-earned promotions of CCC personnel.

Socially speaking, there may be some few Supervisors, Rangers and others with a "too-much-familiarity-breeds-contempt" complex toward working CCC foremen, but these are few and far between. We usually know these men by their first names and few of us lose any sleep over the fact that, imbued with the democratic spirit of our organization, they more often than not address us in a like manner. We know these men, know their families, their background, their previous record in their home communities, and many other facts and details concerning them. We must know these things pretty well or face chaotic conditions in our local personnel. And locally speaking, also, there are many of these fine employees who still believe in Santa Claus. They came to us three, four, or six years ago for possibly a few months employment to tide them over a period when good times were lurking just around the corner, and in spite of an uncertain future, the best of them, with us yet, after the culling of recent years, still have a steady present job. Many of them were recruited from Forest Guard ranks, and the average Forest Guard regardless of his length of service was still a part-time employee on Christmas Day, 1939. Most of these CCC foremen have found what is to them congenial employment and joy in a job of doing something worth while, and after all, there is still an occasional promotion in the CCC ranks. In Forest Service camps, at least, they have become an integral part of the organization which they serve. Surely not entirely "forgotten" men!

THE EDITOR DISCOVERS

"Uncle Sam's Forest Rangers" began their ninth year on the air with the January 5 episode. Since the program was initiated in 1932 through the efforts of C. E. Randall of the Washington Office of Information in cooperation with the Department Radio Service and the National Broadcasting Company, it has been presented regularly each week during the National Farm and Home Hour, with only occasional cancellations when the time was relinquished for the broadcasting of events of national importance. The January 5 program was the 368th episode. The number of stations carrying the program has increased from about 80 to 105 at the present time, which can reach practically all the 26,600,000 family radio receiving sets in the country.

Preparation of the scripts for the programs has been in charge of Mr. Randall, who from time to time has had the collaboration of George A. Duthie, W. I. Hutchinson, R-5, Leonard Shoemaker of Region 2, Marvin Beers, Joseph Hessel, and several others. Harvey Hays, NBC actor who portrays the part of "Ranger Jim", has been on the program since the first episode and was made honorary Forest Ranger of the Forest Service on May 1, 1936, during a specially arranged broadcast. All the original cast was in the NBC broadcasting station at Chicago on January 5 when the ninth anniversary program was presented.

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An article on the life, achievements, and significance of the work of the late Robert Marshall, written by several coauthors, appeared in the December 27 issue of the "New Republic" under the title "Gap in the Front Lines."

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The Division of Marketing and Marketing Agreements of the Department has announced a demonstrational program under which a small quantity of low-grade cotton will be used in the manufacture of high-quality paper. The program provides for purchase by the Writing Paper Manufacturers' Association of lint cotton, spinnable waste, and cotton linters for use in the manufacture of fine writing paper and other papers of similar type. Part of the cost of the raw materials used to carry on the program will be borne by the Department and part by the Association.

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The American Forestry Association has announced that a national conference to study the urgent forest problems of the South will be held under its direction at Biloxi, Mississippi, February 1, 2 and 3. The Mississippi Forestry Association and other conservation agencies will meet with the national association. Tentative program for the conference deals with such specific subjects as the industrial significance of the forest resources of the South; an appraisal of forest fire drain; federal aid to southern forests; business aspects of forest management; industrial research as pertaining to southern woods; State and private forestry developments; and the development of a forest program for the South.

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"The cooperative movement has gone too far to turn back now," says Governor George D. Aiken of Vermont. "It is resulting and will further result in a changing economic structure in America. The quicker this fact is recognized and all groups adjust themselves to the change, the quicker will purchasing power and prosperity be restored to all."

SERVICE BULLETIN

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Vol. XXIV, No. 3 Washington, D. C. February 5, 1940

EXCERPTS FROM STATEMENT BY SECRETARY WALLACE BEFORE THE JOINT COMMITTEE OF CONGRESS ON FORESTRY, JANUARY 17, 1940

That we are here today discussing the next steps in the Nation's forestry program is evidence of the national interest generated by Forest Service leadership. I should like to pay tribute to the work of this pioneer conservation service as I open our Departmental statement. * * * I think every Secretary of Agriculture has been impressed with the zeal and the efficiency with which the Forest Service has carried on its part of the Department's job. I heard of it from my father when he was Secretary. In fact, it has become one of the Department's traditions. * * *

Many of the current programs of the Department of Agriculture had a large part of their genesis in the creeds and practices of the foresters. Control of soil erosion, for example, was one of the earliest objects of forest conservation. So was sustained yield for livestock ranges, the prudent management of the farmer's woodlot, and many more. More recently the foresters have begun in a small way to pioneer a program of homes within the forest areas for some of those whom submarginal agriculture has unsettled -- "rehabilitation-in-place," we call it. Those who are being rehabilitated in this way get part of their livelihood from subsistence farming and part from work in the forests.

The man who would have headed the Forest Service presentation today but for his untimely death typified all that was greatest in forest conservation. Ferdinand Silcox saw in forestry a vast means of promoting social welfare. He loved forests and he loved people; and he wanted one to serve the other. His passion for this, illuminated and energized his every act as an administrator and a leader.

Mr. Silcox came to the Forest Service as a very young man. He rose rapidly to the position of Regional Forester, which he left to perform public service in fields other than forestry. He returned to the Forest Service as it was making ready to swing into a greatly enlarged program, late in 1933. He built on groundwork laid by his able predecessors, the last of whom was Major R. Y. Stuart. It was in this period that the Forest Service demonstrated its versatility and proved its organization. It handled a greatly expanded program, including widespread operations in the forests, quickly, quietly, and efficiently. With the help of the late Robert Fechner and his associates in the Civilian Conservation Corps, the Forest Service did a grand piece of work. * * *

At the same time long strides were made in the acquisition program. More forest land was acquired by purchase than in any time in Forest Service history. Cordial relations were developed and fostered with the States. Cooperative programs were enlarged, and State forestry positions were improved and strengthened.

One of the last of the Chief Forester's achievements was setting up an organization to salvage the timber blown down by the New England hurricane. About 1 billion 750 million board feet of timber on 600,000 acres was laid low by this storm. To date 627 million board feet have been salvaged, of which 276 million board feet is sawn into lumber. The fire hazard created by the hurricane is a public menace. Under Forest Service supervision, the clean-up task, requiring supervision of almost 6 million man-days of labor, is now two-thirds completed.

At the time of his death Mr. Silcox was devoting all of his energies to preparing a set of suggestions for a national forestry program to lay before this committee. His death left this vital effort unfinished. Before he died he had begun to reduce to writing the essence of many years' thinking and experience.

In asking Earle Clapp to direct the Forest Service statements to your Committee, I am placing the task in able hands. He is a real old timer in the Forest Service. He has had a major share in charting its course. The Branch of Research in the Service, and its program of work, greatest in forestry anywhere, is chiefly a product of his leadership. He has on several occasions directed searching Nation-wide surveys of our forest situation and problems and reports to Congress thereon. I am certain you will find him and his associates of the greatest help to your Committee.

TRAINING POLICIES

The following excerpts are from a memorandum by Peter Keplinger, reporting on developments in the training program of the Service as observed by him on a recent field trip to the Regions:

"All Regions now recognize the Service policy with reference to basing training on individual training needs. Before each group training project there is a survey to determine which men need similar training, and what training is most needed. There seems still to be a tendency for Division Chiefs to recommend the points in their work of greatest importance rather than the things poorly done. This tendency must be guarded against, if our training camps are to be of most value. One way in which it expresses itself is in an attempt to cover too much. It is much better to correct a few things that need correction than to try to give general training covering the entire field. * * *

"Another thing observed in more than one Region is that we sometimes do not analyze situations carefully enough to determine the real crux of our problem. What I took as an example of this is, that at Ranger camps in three Regions, no mention was made of or no direct attempt made to train the men in the techniques of supervision, yet supervising the work of others is an important part of a Ranger's duties, and since two camps were for new men it is not probable that they were so proficient as not to need it. In fact, some supervision functions were discussed under 'inspection', but since supervision is so important in itself, would it not give it additional emphasis to discuss it under that title?

"Another general feature in all Regions is the emphasis, seemingly over-emphasis, given to group training. While group training is important, our biggest and cheapest opportunity to improve our work is through systematic, planned instruction on the job by inspectors and supervisors. There is a trend in that direction in some Regions; I think, in all. It was only natural and probably desirable that we first perfect our techniques in group instruction. We are only just beginning to apply training methods to on-the-job training, but now we are finding that the '4-step' method, for example, is a more effective tool for individual instruction than for group training. Further, I understand that it is gradually coming into general use. In this connection, it may be of interest to mention that there is in formal school training now a trend away from mass instruction toward more individual instruction. The leading educators in our schools would like to analyze each pupil's needs and give individual instruction to meet those needs just as we try to do. Ours is a perfect set-up for this most modern and highest type of instruction.

"Speaking of method, it was surprising to find so many administrative men familiar with the more common vocational devices, such as the so-called four-step method and the vocational conference device. One has a feeling, however, that possibly these two methods have been emphasized to the exclusion of others, particularly in Ranger training. We must not forget that our Rangers have been and should be trained to learn from situations direct; to draw inferences from data presented. It is not always necessary to 'tell' and 'show'. * * *

"But, speaking of skills, I want to say here that I saw some wonderfully fine instruction. I remember one outstanding case wherein the instructor knew in his own mind definitely and clearly just what ideas or skills he wanted to put across, and he had developed a method or device for each point. He didn't try to crowd in too much, but had enough to tax the ability of the group. The subject was new to me, but I can now remember every step in the lesson and if I can, so can the rest of the group.

"Contrasted with that was the work of a remarkable technician, but a poor teacher. He tried to cover everything and as a result I remember absolutely nothing that he gave. My hunch is that most of the Rangers are with me in that. He mentioned a lot, but put over very little.

"In the two preceding paragraphs I have done something that ordinarily we should not do -- draw conclusions from insufficient data. But we must know the value of our instruction. Testing the results of our group training is a subject that the Regions are now beginning to take seriously. The most common method seems to be to furnish each functional inspector with the more important points covered in the training, and have him check individual trainees, in connection with his regular inspections, to determine how much they had improved as a result of their training. This method has gotten some good results, but has not yet developed to a point where it is considered entirely satisfactory.

"Another method is to have the Regional training officer spend a part of his time in checking up on trainees in the field. Between the two, or rather as a result of both, pretty fair estimates are obtained, but both methods are expensive. I look for improvements in techniques now that all Regions have become interested.

"Possibly the greatest advance now being made is in the field of post-entry education. All Regions seem to have taken seriously the Department's policy for extending educational opportunities and practically all are doing something about it. Plans were not yet fully developed, but something was under way in each western Region. I presume we will get reports later on what is actually done.

"While I had no opportunity to contact this in the field, it is worth mentioning that some Regions have found Dr. Carl Taeusch's "School of Philosophy' very much worthwhile.

"At least two Regions have followed the suggestion made in our tentative training program and have invited outside experts to speak at group training meetings. Results, I understand, have been excellent from both the training and the public relations points of view. * * *

"I find that five of our ten Regions have training officers and five do not. In the Regions without, some other official has to devote a great deal of time to training or the program lags. In Regions where such officers are employed one gets the impression that they are performing a very useful service. However, I presume it is up to each Region to determine which is best in its particular situation."

(The "4-step" method mentioned by Mr. Keplinger is discussed in the "Fire Guard Training Handbook", pp. 28-50. It consists briefly of the following: Step I - to get the learner in a mental state of expectancy toward the job he is to learn - to raise in the learner's mind the query "How do you do it?" or "How is it different from what I already know?" Step II - to impart the new idea, material, or operation; or, whenever it is possible to do so, to guide the trainee through the thinking process required to grasp the new idea for himself. Step III - the trainee is given an opportunity to apply the instruction presented in Step II. Step IV - to determine in some suitable way whether or not the learner can do the job or solve the problem unaided; it is also a check on the instruction process and the ability of the instructor. - Ed.)

THE WAR AGAINST ACCIDENTS

By H. R. Kylie, Washington

Forest Service CCC safety bettered all previous showings in October 1939, in a combined attack on all accident causes, including hand tools, falls of persons, and falling objects.

Accident frequencies were pushed down to the all-time low frequency rate of 1.15 per 10,000 man-days worked, for the month, with no fatalities. The next to the lowest severity rate ever shown, .26 per 100 man-days worked, was also reported.

The Director of CCC extended his heartiest congratulations on their achievement to the camp superintendents, the foremen, the enrollees, and other members of the Regions' personnel, assuring the Forest Service of his gratitude to everyone concerned.

The Director of Personnel for the Department of Agriculture has also expressed his real appreciation of this record which has been accomplished by the field forces.

If, in the past, our supervisory units have been slow in expressing recognition of success in fighting accidents it is hoped we shall not further fail to give credit when and where due.

THE STORY OF THE FOOLISH AND WISE MEN

By Ernest O. Buhler, Washington

There was a King who gave unto *two villages each a community forest—one forest to each village to be used forever by the ministry of the parish.

And the men in one village were foolish and the men in the other were wise.

They who were foolish took the gift, but they did not know its value. They labored in it not and so their timber was stolen by thieves, the young growth was allowed to be burned, the ground became barren, its springs dried up and even the birds and the beasts found neither water nor shelter therein.

And so their land is now idle and gives no work or comfort or profit to them, nor their children, nor their children's children. When the wind rises, it stirs the outraged earth and blows fiercely its ashes into their foolish mouths and annoys them.

But the wise men in the other village appreciated their royal gift. They knew its value and so they cried—"Let us select three men among us to be stewards over this land." This they did and the stewards were faithful to their trust. They guarded it from thieves. They protected it from fires and they encouraged young trees to take the place of old ones that were cut.

The forest rewarded them for their foresight. It gave work to those who had it not, water and shelter to bird and beast, a playground for the children, a profit to the town; yea, it was a comfort to them all.

But when the profits came, the stewards counselled among themselves and said, "Let us not spend all of our substance but let us save a portion of it for our children that they may honor our names with gratitude." They called in the usurers and said to them, "Take a portion of these profits, hire it out to honest men for interest on good security and make it multiply." And so they did.

Now it has come to pass that during the last 100 years the stewards, the forest and the usurers working together have made a profit from this little 75 acre forest, which surpasses all understanding. It has yielded them a net profit of over 33,000 pieces of silver, of which over 9,000 pieces of silver is cash on hand and kept in trust for the next generation.

But even so, the wise men still have the forest too, which, responding to good treatment, is again renewing itself and is again ready to give more work and more profit to them and their children and their children's children.

Moreover, when the wind rises on a hot summer day it blows the fragrance of growing trees into their nostrils and soothes them in their wisdom.

Verily, so it has come to pass again—whatsoever a man soweth, that shall he also reap.

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* Both forests and both villages are located in the United States.

VISION AND DIET

By George M. Byram, Appalachian Forest Expt. Sta.

In the course of experiments at the Appalachian Forest Experiment Station, conducted to develop an eye test for forest fire lookout men, it was found that the individual's diet seemed to affect his eye test ratings.

Although results are not conclusive, ratings for W.P.A. relief workers averaged more than 20 percent lower than ratings for C.C.C. enrollees, college students, and regular Forest Service personnel. It has been known for some time that "night blindness", a common cause of traffic accidents, is attributable to a vitamin deficiency in the individual's diet, and it is highly probable that such a deficiency decreases retinal sensitivity for daylight vision. The relief workers tested were residents of the mountainous districts of western North Carolina where, by habit or economic necessity, the diet of the people consists of a few foods which are doubtless highly deficient in vitamins and other food essentials. There seemed to be no significant difference between the ratings of men in the other three classes.

The correlation between vision and diet, already established by physicians and research workers, should have a direct application to a lookout man's food requirements. The eye tests for lookouts will soon be available and National Forest officials employing men from the low income groups can easily check this interesting lead.

A LETTER CONDONING CONDOLENCE

Mr. Ed E. Birkmaier,
Forest Service,
Washington, D. C.

Dear Mr. Birkmaier:

I learn from the Service Bulletin of December 26 that before leaving your station at John Day, Oregon, to come to this city, you received a letter from a Portland friend offering condolence upon promotion to the miseries of life in Washington.

I would not have you compare the natural beauties of our Maryland and Virginia countryside, where man's inhumanity to the landscape is quickly healed, with the unsightly scars left by the logger and miner on the grandeur of the Oregon scene, nor set the soft and grateful atmosphere of our beautiful springs and even more glorious autumns against the skin-searing dryness of eastern Oregon and the eternal drizzle of a Portland winter. Neither would I invite comparison between the variety and coloring of our magnificent broadleaf trees with the monotony of evergreens, nor suggest that the friendly song of the mocking bird on your garden fence may be as pleasant to your awakening ears as the howl of a coyote across a mountain meadow. I would not even whisper the possibility that you may find one of the world's most beautiful and interesting cities some compensation for losing Main Street of John Day, or even of Portland.

My only purpose in writing is to urge you never to disabuse your Oregon friend. Do all you can to keep up the myth of a Washington inferno. Never tell him that the breeze blows comfortably in your suburban home, even when the "Oregonian" regales its readers with lurid pictures of eggs frying on the Capitol steps. Join wholeheartedly in the pleasant little conspiracy to broadcast to the field the worst aspects of Washington life with utmost exaggeration. It sweetens immensely the existence of the less privileged if they are allowed to believe that every advantage is with them. If it makes life more endurable in the wide open spaces to picture it as drably miserable here, by all means let us keep up this innocent deception which harms no one and gives pleasure to many.

Very sincerely yours,

(Signed) R. C. Hall

ANOTHER REPLY TO "A LETTER OF CONDOLENCE"

Mr. Ed Birkmaier,
Onetime Supervisor,
Malheur National Forest

Dear Birk:

Congratulations on your transfer to Washington. You will like it here, although you will miss the mountains of Oregon, the music of the wind in the pines, and the lonely call of the coyote. But fortunately we humans can adjust ourselves to new places and conditions. Unlike animals, we can enjoy a wide variety of things.

The raise you got will probably be absorbed by increased expenses. However, costs of living in Washington are greatly magnified. Most Forest Service people live in attractive suburbs where rent is not unreasonable; and you will agree that food prices are fairly well standardized all over the country.

About the weather here, Birk, you will find it not bad. True, many claim they suffer in summer, but I think it's their livers and not the humidity. During the past five years, the hundreds of apartments, and thousands of homes built in and around Washington give much better selection of comfortable dwellings than formerly. Sure there is some hot weather every summer; at least two or three weeks are pretty warm. But the mean temperature for last June, July and August was only 76.8 degrees, and the highest was 100° (only one day). You will be comfortable to sleep without any covers for a week or two, and I will confess that I sleep without my pajama "tops" four or five nights during the summer, but I've never had to toss my naked body on wet sheets and curse all night, but it probably has been done.

About the winter weather. Well, you have seen this year about as bad as you will see in Washington. There wasn't even a surface freeze or snow until Christmas. The willows were green along the Potomac until the middle of December. On the 15th I saw workmen putting up Christmas trees on F Street and around the corner on 12th Street, the young sycamores still had green leaves. But since Christmas there has been some snappy weather, a six-inch snow, and ice thick enough for skating. One night the temperature fell to 15°, but only once in a blue moon do we have below zero weather as in Eastern Oregon. Last year the mean for December, January and February was 39.5, and the lowest was 17° (only two nights).

You're an outdoor man, Birk, and for that reason alone you should like it here. Potomac Park extends to within a stone's throw of your offices, and from there miles and miles of foot and horse trails lead in both directions. If you like to ride a Cayuse in a western saddle, you may hire them from many stables near the city. That is much less expensive than buying hay all year. If you like to hunt, there are ducks in season along the lower Potomac. Forty miles into Virginia or Maryland brings you to fine quail country. Two hours driving takes you to the deer country of West Virginia and Pennsylvania, where they kill annually more deer than in Oregon. There's bass in the Potomac and Shenandoah, trout in the mountain streams of Maryland and Virginia, and sea trout and blues in the Chesapeake. When you long for the mountains, a 50 mile drive will bring you to Blue Ridge, and 80 miles to Hawk's Bill mountain, 3200 feet high - mere foothills to you, but it takes a man to climb them. In winter, you can hop a ski train for the mountains and wear yourself out on the courses all day. You can see big-league baseball, football, and basketball; play golf or tennis; go swimming.

I know you like good music, or you wouldn't appreciate the contralto of wind in the pine trees. Here in Washington you can hear some of the greatest symphony orchestras, and operas and good shows come to town often.

Don't be scared of Washington, Birk. It has too many nice things to search for the bad.

So let me congratulate you, Birk, on being able to live in Washington. It has about everything a man like you would want.

Your friend,

(Signed) G. H. HIERONYMUS

"SKI SAFETY AND FIRST AID"

A Review by Robert S. Monahan, Washington

Although written primarily for the use of the Ski Patrol System organized by the National Ski Association and for the guidance of city-raised skiers exposed to an unfamiliar environment, this forty-page printed booklet is crammed with such practical information that it should be called to the attention of the hundreds of Forest officers engaged in all-weather field duties.

With commendable foresight, the American Red Cross has appreciated the need of greater safety and physical comfort for winter sports enthusiasts. Dr. Laurance M. Thompson, the Assistant Director of its First Aid, Life Saving and Accident Prevention Service, was assigned the responsibility of investigating the entire problem. "Ski Safety and First Aid", published in January, is one of the many tangible results of Dr. Thompson's study. It enjoys the advantage of having been prepared first in mimeograph form for review by numerous authorities on the basis of actual experience. This material is supplemental to the First Aid Textbook of the American Red Cross.

The booklet will be found useful not only to planners and administrators of winter sports areas in the National Forests but more especially to field personnel who must face extreme winter weather in carrying on regular work and in leading rescue parties.

A few section headings suggest the usefulness of this booklet to anyone interested in his own personal comfort and the safety of winter visitors to the National Forests: Prevention of Skiing Accidents, Transportation of Injured Persons, Ski Tow Hazards, Effects of Exposure to Cold in Case of Injury, Shelter in the Snow, Protection of the Eyes - "Snow Blindness", and Avalanche Danger.

"Ski Safety and First Aid" is illustrated with several sketches and photographs, including Forest Service photos of the Mount Hood ski patrol and a White Mountain National Forest trailside rescue cache.

Copies of this publication may be obtained gratis from the National and Eastern Area headquarters of the American Red Cross in Washington, or from its branch offices in St. Louis and San Francisco.

WILDLIFE COOPERATION WITH THE STATE OF VIRGINIA

By John H. Hatton, Washington

Effective July 1, 1938, the entire areas in the George Washington and Jefferson National Forests of Virginia, comprising nearly 1,300,000 acres under federal administration and a gross area of over 2 780,000 acres, were covered by a cooperative agreement between the Forest Service Region 7, and the State of Virginia. This constitutes the largest cooperatively managed wildlife area east of the Mississippi. Like a number of other agreements which have been negotiated in the eastern regions, the one for Virginia is, in effect, a detailed current working plan financed in large part and made possible by a special license fee of $1 per person which is applied to the development and management of the areas for wildlife purposes. The fee is collected by the State and a stamp similar to the duck stamp is attached to the regular State license.

The monies collected for the fiscal year ending June 30, 1939, the first year of the operation of the agreement, totaled $11,689. Of this amount $3,000 was applied to the game protection fund and the balance to other wildlife purposes, among which are the assignment of 6 deputy wildlife managers to the Jefferson Forest and 10 to the George Washington at the salary rate of $50 per month. The Forest Service supervises the work of the wildlife managers covering the following activities on the basis of planned time and costs:

	Percent
Environmental improvements	22.0
Improvement construction and maintenance	22.0
Law enforcement	18.0
Control of undesirable species	11.0
Stocking (game and fish)	10.0
Surveys, census and records	8.0
Job training and public relations	6.0
Emergency feeding	3.0
	100.0

Detailed financial statements are set up which provide for the application of 94 percent of the funds to the classifications above listed and 6 percent to educational activities.

Work plans for the year beginning September 1, 1939 and ending August 31, 1940 have been prepared by the Forest Service and county wardens for each deputy manager.

Every three to six months work conferences will be held by the district ranger to discuss current wildlife programs and problems, the conferences to be attended by county game wardens, district rangers and other members of the supervisor's staff, and deputy wildlife managers.

THE EDITOR DISCOVERS

The announcement of the forthcoming Junior Professional Assistant examination shows 28 optional subjects instead of 22 for last year. The examination, as last year, consists of two parts (1) a general or intelligence test, and (2) a professional test. The first will be given a weight of 30 and the professional test a weight of 70 in determination of the final ratings. It is understood, although this is not included in the formal announcement, that a less difficult intelligence test will be given in this year's examination than was given last year. Last year 38,976 were admitted to the examination and 9,341 passed - or only 24 percent. There will be no optional questions in the Junior Forester examination this year.

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The New Mexico State Tourist Bureau at Santa Fe has issued a very attractively illustrated booklet on the Coronado Cuarto Centennial, which will be held throughout the Southwest this year. In commemoration of the exploits of Don Francisco Vasquez de Coronado, who in 1540 explored New Mexico, quaint and natural native fiestas, ceremonials and rodeos, authentic historical pageants, exhibits of New Mexican arts and crafts, and typical native music and drama will be featured in a series of celebrations in various cities lasting from May to November. The booklet contains a two-page picture layout with descriptive material on the National Forests of New Mexico, entitled "Cool and Green are the Great National Forests in the High Country". The Tourist Bureau has printed 200,000 copies of the booklet and is advertising it in "Life," "Saturday Evening Post," and other national magazines.

Arizona is also making plans for a State-wide celebration of the Centennial. These include: dedication on the Arizona-Mexico boundary of a monument to the Conquistador and later a Memorial Museum, with a pageant in early April of Coronado crossing the line into Arizona. Later would come the Alarcon-Diaz water pageant at Yuma, then in the latter part of April, a re-creation of the March from somewhere near Clifton north, perhaps the Coronado Trail, across the Crook and Apache Forests, towards Zuni, "one of the Seven Cities of Cibola." In May would come the taking of Hawikuh and in August the discovery of the Grand Canyon by Cardenas.

Congress has made an appropriation for celebration of the Centennial in both States.

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In Region One a cooperative school of public administration is being held at the Montana State University from January 29 to February 23. Forty lectures will be given by members of the faculty on Business Administration, Psychology of Personnel Work, Theory of Public Relations and Public Relation Vehicles, General Principles of Sociology as Applied to Developing Social Programs, and Economics of the Present. No academic credits will be given this year.

An enrollment of 25 people is the maximum number the university will accept. Twenty-one applications were received prior to January 19, indicating a great deal of interest among the Region's younger men in availing themselves of an educational opportunity. Similar schools are in progress in five Regions.

A unique feature in R-1 is that more than half of their circular letter to the field advertising the school is a series of quotations from the Forest Service training policy statement.

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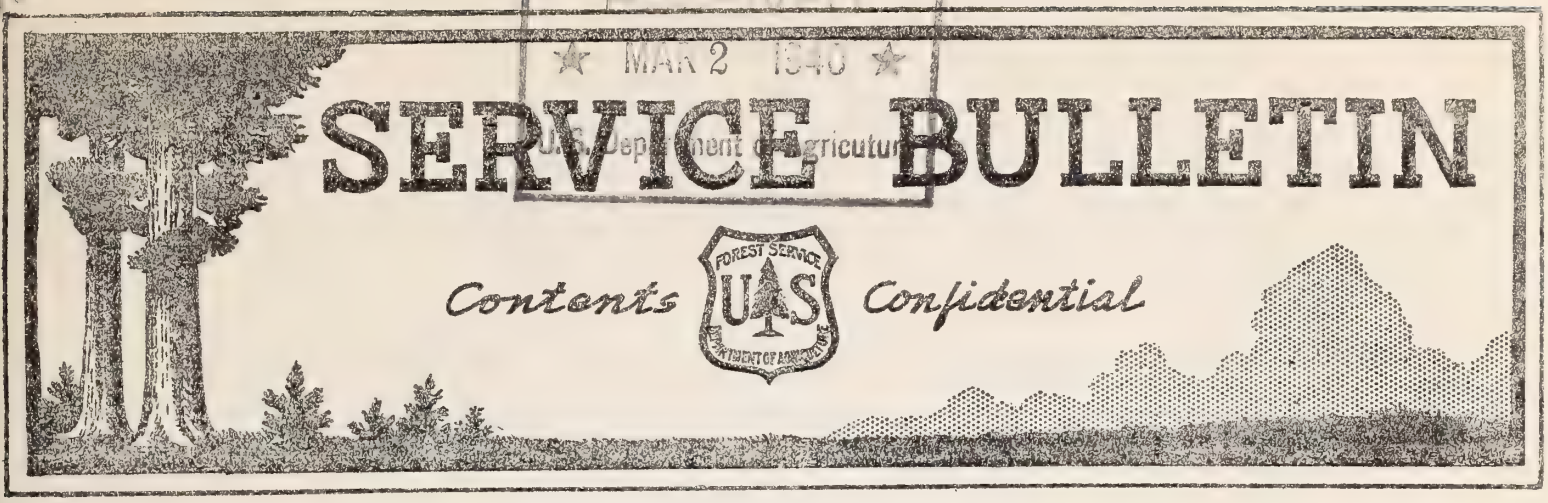

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 4 Washington, D. C. February 19, 1940

THE CASE FOR FEDERAL ACQUISITION OF FOREST LANDS

By Elers Koch, R. 1

Opposition to further federal acquisition of forest lands seems to be increasing. At the recent hearings of the Joint Congressional Committee at San Francisco and Portland, man after man got up and declared himself against any further appreciable increase in federal holdings. Practically no support was offered for a federal acquisition policy -- nor was any explanation presented as to why the Forest Service advocates the acquisition of an additional 100 million acres in the United States.

The question might be raised as to whether the Forest Service has not developed this situation by trying to ride two horses at once. As I take it, the average Forest Service man who advocates a large acquisition program does so not because he is socialistically inclined -- nor because he believes in the fundamental policy of government rather than private management of natural resources -- but because he has been forced by analysis of the economic factors of the situation into the conviction that in many regions the holding of timberlands for forest production is not an attractive investment for private capital and that only a very small number of the owners of timberland have the slightest desire or intention of holding their lands for such purposes.

The Forest Service has never clearly stated this condition. It has concentrated its resources and publicity in the effort to show that forestry on private lands is profitable and practicable. It has not honestly admitted that there are vast areas, particularly in the West, in which public ownership is the only apparent answer -- unless private landowners are so heavily subsidized that the public carries most of the cost of taxes, protection, and tied-up capital.

Most of the opposition to a large federal acquisition program has come from State officials, sensitive to States' rights, or from individuals who have such a fundamental fear of socialistic measures in any form that they oppose any extension of public control although they have no satisfactory alternative to present. The actual owners of timberlands are saying very little. A very high percentage of them are continuing the liquidation process, and will very frankly admit that they have no intention of going into the timber-growing business. The returns are too small, too uncertain, and too far in the future to interest them.

Even in the case of a widely publicized recent case in the ponderosa pine region where a large owner has experimentally adopted a light selection cut, an official of the company openly states that if the government does not take over the cut-over land at what the company considers a fair figure it will proceed to liquidate the balance of the timber remaining on the land.

My associates and I have worn out many pencils vainly trying to present a case for a satisfactory financial showing for individuals or corporations permanently holding land for forest production in this region. I know the same situation to be true in other western regions. Is it not time for the Forest Service to come out honestly and admit this situation, and explain to the industry and the public that its acquisition proposals are based on a premise that only the Federal or State governments, which are interested in long-time production, and in indirect as well as direct returns, can afford to hold a high percentage of the forest lands of the country? That would clarify the issue and smoke out some of the dog-in-the-manger opposition.

SHELTERBELTS AND WILDLIFE

"The attraction that shelterbelts may have for wildlife has been a subject of considerable interest to those of us in the Forest Service who are charged with the responsibility of carrying on the shelterbelt planting program in this State. Accordingly, last fall we sent simple questionnaires to 165 farmers in central Kansas who owned shelterbelts of various ages and asked these men to report their observations on this subject. A summary of the returns from this questionnaire contained the following information:

"The farmers estimated there were 250 pheasants in 48 shelterbelts and that more than 1400 quail made use of the trees for nesting, feeding, and refuge purposes. Over 10,000 small insectivorous birds were reported which indicates that the trees may be quite helpful in making possible a large population of birds which will be effective in controlling insects.

"Some of the older shelterbelts are developing wildlife communities. The farmers reported more than 30 opossum, 228 skunks, 200 squirrels and 33 badgers. A few coyotes have been attracted also, presumably because of the rodents, which include pocket gophers, kangaroo rats, mice, jackrabbits, and cottontail rabbits. The badgers are thought to be hunting pocket gophers and similar prey. When we consider that none of the trees were more than five years old, it seems to me that we have plenty of evidence to state that the shelterbelts are attracting large numbers of various kinds of birds and fur-bearing animals. It would seem that the influence of these belts would be considerably greater each successive year as the trees develop." — Letter from T. Russell Reitz, State Director, Kansas.

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"A recent inspection of the shelterbelt plantings we have assisted in establishing in the State impressed us more than ever with the great benefits these plantings are providing to Nebraska's wildlife. . . . Apparently the heavy snows over the State and the excessive cold have caused game birds and small game animals to congregate in the shelterbelt plantings. . . .

"The following wildlife was seen in plantings, by Shelterbelt Districts:

"In the Neligh District, 121 pheasants, 25 prairie chickens, and 2 quail were actually seen in 18 shelterbelts, only one of which was an older belt planted in 1935. None of the others were planted before 1937. Numerous cottontail and jackrabbits are to be found in nearly every planting.

"A flock of some 200 sharptail grouse may usually be found in the Ferdinand Seidler, Charles Murphy, or Thomas Putman shelterbelts in Box Butte County, a part of our Alliance District. A count, conducted earlier this fall, of the birds in 21 shelterbelts all planted since 1937 yielded 485 pheasants and 125 other small birds in addition to the sharptail grouse.

"In the Kearney District, especially in Custer and Logan counties, an unusually large number of birds and animals were seen in the plantings the past week. On the M. V. Ambler shelterbelt four miles southwest of Stapleton, 2 sharptail grouse, 13 prairie chickens, 40 to 50 pheasants, and several rabbits were seen. . . . .

"On the Glen Viehmeyer farm 4 miles northwest of Stapleton, 13 of the 14 chukar partridges 'planted' on the farm were found enjoying the cover and food provided by the shelterbelt. Mr. Adolph Hamm, District Agent, Biological Survey of Cheyenne, Wyoming, estimated there were 200 pheasants in another shelterbelt planting on this same farm.

"North of Broken Bow, enroute to Gates, two large covey of quail, 18 to 25 in each covey, and several smaller covey were seen in the plantings, plus large numbers of pheasants and rabbits and a few prairie chickens. . . . .

"In all Districts there are many indications that wildlife is making increased use of the plantings as they grow older and attain greater size. Badgers, coyotes, and fox are moving into the belts. Large, well packed trails made in the snow by pheasants and rabbits in nearly every planting of any size are definite indicators that the belts are used extensively.

"Smaller birds such as brown thrashers, woodpeckers, bluejays, robins, meadowlarks, blackbirds, orioles, swallows, sparrows, catbirds, and others throng the shelterbelts in the summer time."

-- Letter from John L. Emerson, State Director, Nebraska

TEXAS REIMBURSES COUNTIES FOR LOSS OF TAX ON FEDERAL ACQUISITIONS

By R. C. Hall, Washington

Pursuant to a law enacted by its 1939 legislature, the State of Texas is reimbursing certain counties, including those in which lands have been acquired for National Forests, for tax losses sustained through federal purchase or lease. The entire State levy on general property within the county is earmarked for this purpose, but the maximum amount which the county receives is the tax which would have been currently levied on lands purchased or leased by the Federal Government had they remained in private ownership. The law is not entirely clear, but according to press reports, it has been ruled that the school districts also may obtain similar reimbursement for their share of tax losses.

Irrespective of the immediate considerations that may have motivated the Texas Legislature, this measure accords well with the conclusion of Forest Service studies that substantial benefits from the extension of National Forests accrue to the State at large; whereas the tax loss, in the absence of some such measure, falls largely on the local governmental units. Texas is not the first State to take action of this kind, since New Hampshire and Pennsylvania have for some time made partial recompense to their local governments for tax losses resulting from acquisition of National Forests.

F. A. SILCOX

(From Jay Franklin's syndicated column "We, The People")

As I was crossing Constitution Avenue on my way to the white marble Department of Agriculture, a tall figure waved to me. It was Death, so I stepped quickly and let the truck, which had almost run me down, thunder past. I waved back at Death. He's an old acquaintance of mine by now and, though I hesitate to call him a friend, I've known those who welcome him.

Just then I was very much annoyed with Death. Within three successive days he had taken Heywood Broun, the lovely wife of a cousin of mine, and the Chief Forester of the United States -- an old friend -- who had come down with heart disease as an elm crashes in still weather, not as I would have liked him to go, as an oak struck by lightning in an equinoctial gale.

"What's the idea of taking Silcox?" I demanded angrily. "What are you doing up here, anyhow? I thought you were busy in Finland and on the North Sea --not to mention Montevideo."

Death smiled rather grimly. "I find I can leave that to my self-appointed deputies", he said. "Who did you say? Silcox?"

"F. A. Silcox," I said, "Chief Forester of the United States -- a Southerner, a liberal, a scholar and a gentleman."

Death shook his head. "Can't say that I place your friend," he remarked. "I'm kept pretty busy, you know."

"Silcox," I repeated. "He's the man who made the CCC click, the man who settled the elevator strike in New York, the man who started the huge shelter-belt of trees out on the edge of the Great Plains, the man who turned down the offer of the job of Undersecretary of the Interior in order to hold the Forest Service in the Department of Agriculture."

"You must know Silcox," I continued. "He's been flirting with you for years, giving himself to his job long after the doctors warned him to go easy. "Why," I argued, "Silcox is one of our great public servants.

"I've seen him in the tropical jungles of Puerto Rico, I've run across his trail in the lively little town of Missoula in Western Montana, down in the steamy pine-barrens of the Carolinas, out by the snowy peaks of Oregon and amid the dams and dynamos of the TVA. He fought for conservation when Taft was President. He kept down trouble with the IWWs in the Northwest during the first World War. He did a swell job in labor relations for the New

York printing trades during the 1930s, and after his predecessor died of overwork, he took charge of the United States Forest Service in 1933, and gave the people of this country all he had until it killed him. He was a great man, the sort of man we build monuments to when we hear about them. And you mean to say you don't know Silcox when he's staying with you right now?"

Death looked embarrassed. "I ought to know him," he agreed, "but I can't quite place him. What does he look like?"

"He's a tall, lean, well-set man," I said, "with white hair, bright eyes, and a smile that you can't forget."

"You don't mean 'Sil' by any chance?" asked Death.

"That's it! Silcox or 'Sil'," I agreed.

"Oh, Sil," said Death. "Sure! I know him well. I'm going to miss him, too. He didn't stay with me long, you know."

"Don't all your guests generally remain with you?" I inquired sarcastically.

"Not all and least of all Sil," Death told me. "And I wanted to have a talk with him, too, but I was called away to Buenos Aires to take charge of a brave German naval officer whose stupid Fuehrer had disgraced him, and by the time I got back, Sil had left."

"What's he doing now?" I asked.

"He was too vital to stay with me," said Death. "Now he's out timber-cruising in the Garden of Eden to see if he can't cut away the weeds and vines from the Tree of Life."

(Jay Franklin was a close personal friend of Mr. Silcox. -Ed.)

MORE ABOUT "FORGOTTEN MEN"

By C. B. Sutliff, R. 1

Jno. D. Guthrie's article, "CCC Foremen--Forgotten Men", which appeared in the December 11 issue of the Service Bulletin, is a commendable contribution in behalf of the cause of one group of men for whom the Forest Service is responsible. It should serve as a stimulus to action also in behalf of another group of Forest Service employees who, too, may well be classed as "Forgotten Men". Who are they? The fire guards and seasonal employees of the Forest Service; the very backbone of the forest protection organization; those men upon whom the Service invariably relies in times of emergency, be it fire, flood, insects or organization expansion to accommodate emergency relief work measures. Yes, they, the fire guards and seasonal workers, are the men upon whom the Service depends in emergencies and for jobs which require individual initiative, skill and dependability. Yet, when funds are low they are laid off without ceremony and the fruits of their labors go unsung or, occasionally, are accredited to others.

Let us describe briefly the plight of the fire guard in comparison with that of the CCC foreman. Before continuing however, let it be understood that there is no intention to belittle the plight of the CCC foreman as so accurately portrayed by Mr. Guthrie.

The annual gross earnings of CCC foremen will average $1680 and up. The annual gross earnings of fire guards (western regions) will average $840 and down. Monthly pay rates for CCC foremen range from $125 to $217 while the fire guard rate ranges from $90 to $175. Quarters deductions and rations charges, when furnished, are materially the same for both classes of employees. CCC foremen quarters are not the best it must be granted but even the poorest of these will compare favorably with the usual run of guard quarters. Fortunate indeed is the fire guard who has a well constructed cabin or lookout house, accessible by road and not more than a hundred yards from water (cold only). Usually his station is isolated, his wood and water supply some half mile or more away and frequently his quarters is a tent camp perched upon some exposed point where wind and lightning play. As to family reunions the CCC foreman can visit his family or they visit him at fairly regular intervals (and frequently they reside nearby) while the average fire guard usually bids his family farewell at the beginning of the field season and considers it quite a privilege if he sees very much of them before the close of the season. Often when the fire guard's station is on a road it is necessary for him to have the family car (those who can afford one) with him for official use. This is not required of CCC foremen.

Who are our CCC foremen and our fire guards? By and large they are pretty much the same class of men and of very similar circumstances insofar as means of livelihood are concerned. In many cases CCC foremen positions have been filled from the fire guard and seasonal employee ranks. A few casual inquiries of ex-fire guards who are now CCC foremen will quickly dispel any doubt as to who are the really forgotten men. Few if any of these men would voluntarily give up their CCC foreman positions to return to fire guard positions if offered a choice. On the other hand many a fire guard would again believe in Santa Claus if given an opportunity to accept a CCC foremanship position. Truly, if there is a "lower one third" among government workers it is the fire guard and seasonal worker.

Fire guards and seasonal workers (which do not include fire fighters and other classes of laborers employed only during emergencies or for short periods during nonrecurrent peak work loads) are usually recruited locally. Many of them are dependent primarily or solely upon Forest Service employment for a livelihood. Their services are required at a time of the year when other employment, if any, is available. They are laid off at a time when other employment is scarce. Fire guard job requirements are such that only men of average intelligence, or above, who are within restricted age limits and can meet strict physical requirements can qualify. Many of the guards are high school and college graduates including a high percentage of forestry school students, graduates and civil service eligibles. All of which, except for one obstacle--period of employment, indicate the desirability and practicability of making career jobs out of fire guard positions, at least those in the upper brackets.

Why shouldn't our National Forest resources contribute more to the social and economic welfare of our country than they do at present? And how could they better contribute than through stabilization of fire guard employment? The prevention or timely suppression of an additional one percent or less of the fires which occur annually,--that small percentage of fires which cost the government great sums for suppression and cause incalculable damage--is not outside the realm of possibilities of an efficient protection organization. Such an organization might well be developed through stabilized employment and at less over-all cost than the present prevention and presuppression plus suppression bill, not considering damages.

So, while we are considering "Forgotten Men" let us not overlook the fire guard and seasonal worker. Give them assurance of any sort of stabilized employment whereby they are assured an average of even eight or ten months employment at a reasonable wage and the increased cost will be more than offset by dividends returned in the form of lower suppression costs and reduced damages.

LIGHTNING AS A CAUSE OF TIMBER MORTALITY

By R. R. Reynolds, Southern Forest Experiment Station

During the past 2 years, all merchantable timber that has died from various causes on the Crossett Experimental Forest has been salvaged, and the amount of mortality per acre per year and the cause of the death of each individual tree have been determined. Contrary to the popular belief that most mortality in selectively cut as well as uncut stands is caused by wind and "bugs," it was found that lightning was directly or indirectly responsible for fully 70 percent of the total volume loss. Although over 50 percent of all trees at least 4 in. d.b.h. that died during this period were killed by insects, lightning was _indirectly_ responsible for a large majority of these deaths. In most cases the beetles, which were first attracted to trees killed or weakened by lightning, later attacked and killed smaller adjacent trees.

Very few lightning storms pass without killing or injuring some trees; and two recent storms were responsible for the death of at least 11 shortleaf and loblolly pine trees 13 - 20 in. d.b.h. Since the trees killed are usually among the largest in the stands, a severe storm may account for a relatively large loss of volume. Severe storms may occur only once or twice each year, however, and most of them to date have not killed or injured as many trees as the two storms mentioned, so that the total loss over an average of several years is not a serious handicap to selective cutting or other good forestry practices. Although _Ips_ or _Dendroctonus_ beetles may cause a large annual loss of volume to trees injured through poor felling practices, where selective cutting is carefully done, lightning appears to be the chief cause of loss of volume through mortality. -- "Southern Forestry News"

FOREST SERVICE MODERN?

By Jane Snyder, R-7

There's no denying that the Forest Service has gone modern in many ways. Our publications not only have a modern appearance, but they are written in a more understandable, modern fashion; the tone of our official correspondence has changed for the better and many old stock words and phrases once the bane of the new stenographer's existence have disappeared to a great extent; our social affairs have gone modern in a big way, and last but not least, our thinking is modern as we keep abreast of the many social and economic changes affecting our objectives.

But somehow we cannot shake off a few of the old and seemingly out-of-date practices in office procedure. The mandatory instructions with respect to initialing correspondence is a case in point. According to the Manual (yes, the new one) the typist's initials must be indicated in the lower right hand corner of the file copy, while the author, regardless of whether or not he is the signer, must be kept secret; however, he does initial the file copy if he does not sign the original. In many instances why should we not follow the practice of the majority of other public offices and outside agencies by indicating on the original, and thus on all copies, the initials of the author followed by those of the typist, these to be typed before the letter is removed from the machine, on the left (not the right hand) margin? A recent check on letters received at one Forest Service desk from "outsiders" during the course of one day indicated that this practice was followed 100 percent. Included were letters from a Governor, a State Forestry Association, a State Conservation Department, a United States Senator, and a large business firm in New York City.

It is appreciated that this practice of revealing the author cannot be followed in all letters, as, for example, in a letter of reprimand which would lose its force if the initials of other than the signing superior were shown; likewise, many of our letters to the public should not indicate the author if other than the signer. On the other hand, letters of commendation carry more weight if it is known that the Boss himself wrote the letter. In routine Service correspondence we all know that the signer may seldom be the dictator, but does it matter?

The stamping of the signer's name on the file copy to "guarantee that the original was mailed" and actually signed, is another seemingly out-of-date practice peculiar almost entirely to the Forest Service. A note as follows:/s/ L.F.Kneipp, written in ink by a clerk may be traced to its writer if necessary, but a rubber stamp is just a stamp and there is no magic in it to guarantee anything! Stamps for this purpose and for typists' initials involve expenditure of funds which might be made available for more urgent supplies. And, of course, stamps call for messy old pads.

A modern device seen to an increasing extent outside the Service, and occasionally within our organization, is that of including on the original and all copies the distribution of carbons. Thus the receiver of the original or a copy knows who has been furnished with the information, saving no end of work in many cases.

Region Seven has used most of the practices discussed here with highly satisfactory results. Our correspondence has a modern appearance, useless work is eliminated, and there is real economy in funds reflected in saving of time and cost of stamps. The matter of divulging the author on certain correspondence is not a new suggestion since the Bulletin carried an article on it years ago. If the number of years ago was seven (that lucky number!) it may be significant, as a well known adage is: "Keep a thing seven years and it finds a new use."

(Note: These comments do not necessarily represent the official opinion or approval of the Eastern Region.)

MICHIGAN COUNTIES ADOPT RURAL ZONING

(From "National Municipal Review," December 1939)

With the adoption of county zoning ordinances by Marquette and Delta Counties in its Upper Peninsula, Michigan joins Wisconsin and California in regulating the use of rural land, reports the American Society of Planning Officials.

The purpose of rural zoning is to provide for the best use of land. By regulating the new settlement of those who wish to make a living from agriculture, for example, counties can prevent the location of farms on unproductive land which may be better fitted for other purposes. Counties thereby also eliminate the expense of supplying governmental services to widely scattered residents.

Marquette County, Michigan, 1,738 square miles in area, is the largest county in the State. The northern part of it is rocky and hilly, generally unsuited to farming. The central section is a sandy plain of doubtful fertility. In the southeastern section are approximately 330,000 acres of fertile sandy loam and clay loam which can be farmed profitably.

The new rural zoning ordinance has divided the county for three types of land use: forestry, recreation, and unrestricted (where farming can be done). People now on the land may continue whatever use they are making of it, but no new use contrary to the ordinance will be permitted. The ordinance is administered jointly by the State and county planning commissions.

County zoning, of which rural zoning is a part, is approximately 15 years old, according to the society. The first State to adopt an enabling act to permit regulation of land use in rural areas was Wisconsin, where Oneida County first passed a county zoning law in 1933.

Twenty-four Wisconsin counties, including five million acres of land, have been zoned. Rural zoning in California is mainly rural-urban, with both city and county joining in regulating land use for commercial, residential, agricultural, and other purposes.

Among other States with county zoning enabling acts, thus far put to only limited use, are Georgia, Indiana, Maryland, Pennsylvania, Virginia, and Washington.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

BARRETT, L. I., and RENSHAW, J. F. Factors affecting the costs of producing oak cordwood. tables, graphs. Jour. Forestry 37(12): 947-954. Dec. 1939.

BRIGGS, A. H. Report of planting experiment to determine the effect of root exposure on deciduous planting stock. tables, chart. Jour. Forestry 37(12): 939-943. Dec. 1939.

BROMLEY, W. S. The "Two-cut" system of forest liquidation in the Lake States region, by Charles H. Stoddard, Jr. 45p. illus. The Charles Lathrop Pack forestry foundation, Washington, D. C. 1939. (Book review). Jour. Forestry 37(12): 980. Dec. 1939.

INESON, FRANK. Forestry as it is related to long-term agricultural credit program. South. Conservationist 6(6): 16-17. Sept. 1939.

KIRKLAND, B. P. Role of mechanized logging in German forest management, by Adalbert Ebner. 29p. illus. Prepared for and published by the Woodlands section, Canadian pulp and paper association, Montreal. 1939. (Book review). Jour. Forestry 37(12): 981. Dec. 1939.

LE BARRON, R. K. Fire babies. illus. M. A. C. Gopher (Minneapolis athletic club), Nov. 1939. 2 p. (Reprint)

LEXEN, BERT. Growth following partial cutting in ponderosa pine. Jour. Forestry 37(12): 943-946. Dec. 1939.

LIEFELD, T. A. A simple efficient sign-stenciling apparatus. illus. Jour. Forestry 37(12): 971-972. Dec. 1939.

MESAVAGE, CLEMENT. Comments on Henze's article "A device for measuring sample plot radius", and subsequent discussion by G. H. Lentz and Ellwood Wilson. Jour. Forestry 37(12): 972-974. Dec. 1939.

MORSE, C. B. How our Government agencies look upon winter sports. California 29(12): 17, 37-38. Dec. 1939.

OSTROM, C. E. La question des exotiques (The question of exotics), by A. Engel. Jour. Forest. Suisse 89: 49-55, 73-81. 1938; Essences exotiques dans la foret francaise (Exotic species in the forests of France), by L. Parde. Bul. Soc. Forest. Franche Comte 22: 60-66. 1937; Le robinier en Roumanie (Black locust in Rumania), by J. Venet. Rev. Eaux et Forets 75: 592-597. 1937. (Book review). Jour. Forestry 37(12): 985-986. Dec. 1939.

PEARCE, W. J., and ROESER, J., Jr. Growth in cutover stands in the Engelmann spruce type. table. Jour. Forestry 37(12): 977. Dec. 1939.

RIETZ, R. C. Effect of five kiln temperatures on the germinative capacity of longleaf pine seed. tables, charts. Jour. Forestry 37(12): 960-963. Dec. 1939.

RIGHTER, F. I. Early flower production among the pines. illus. tables. Jour. Forestry 37(12): 935-938. Dec. 1939.

SMITH, C. S. Does private forestry pay. illus. South. Lumberman 159(2007): 29-30. Nov. 15, 1939.

SPARHAWK, W. N. The northern countries in world economy. Denmark, Finland, Iceland, Norway, Sweden. Prepared by an Editorial committee for the Delegations for the promotion of economic cooperation between the northern countries. 2nd, revised edition. 183p. illus. Published by the Delegation. 1939. (Book review). Jour. Forestry 37(12): 981-982. Dec. 1939.

TIEMANN, H. D. Lessons in wood technology. XVII. Paper and pulp from wood. illus. (to be cont.) South. Lumberman 159(2007): 47-50. Nov. 15, 1939.

THE EDITOR DISCOVERS

Lee B. Johnson, who was in charge of the Forest Service exhibit at the Golden Gate International Exposition from May 1 to October 15, 1939, reports that practically everyone who entered the Shasta-Cascade Building visited the Forest Service exhibit. The total Exposition paid attendance for the period February 28 to October 29 was 10,496,203. Visitors to the Shasta-Cascade Building and the Forest exhibit totaled 3,000,000 people, or over 25 percent of the entire Exposition gate.

Mr. Johnson states that he supervised the distribution of 225,000 Forest Service miscellaneous pamphlets and maps on fishing, hunting, fire prevention, forestry, and conservation in general. Distribution was also made of Forest Service souvenirs - 125,000 Big Tree cones supplied by the Sequoia National Forest and 500 pine cone ash trays, which were given to leading conservationists and special visitors. Mr. Johnson conducted 285 lecture tours through the building, giving two and sometimes three tours daily. Each tour took 30 minutes and consisted of a descriptive talk on the exhibits, trees, shrubs, flowers and live game birds in the building and court. A total of 3,500 people attended the lecture tours. The following Forest Service films were shown in the Knotty Pine Room Theater: "Winter Sports in the National Forests," "Singing Reel," "Game Trails," and "Beavers at Home." The total attendance at these programs was approximately 3,500 people.

The Forest Service Exhibit consisted of a Recreational Campground Diorama, designed and built by Paul Fair and Glen Bergen of the Forest Service Exhibit Shop at Berkeley; "The Four Horsemen of Forest Destruction" Cyclorama; a detailed colored wall map of the eight National Forests in the Shasta-Cascade Wonderland; and two enlarged photographs of forest scenes.

A personal Forest Service "good will" contact was made by Mr. Johnson at practically every exhibit building on Treasure Island, and a supply of a pamphlet entitled "Forestry and Conservation Exhibits at the Golden Gate International Exposition," describing the forestry and conservation exhibits in each building, was left at each information desk.

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Each Region seems to have some one Forest that is of especial importance in timber sales. Sometimes, but not always, this is indicated by the amount of receipts from that Forest. For F.Y. 1939, that yardstick shows as results: R-1, the Kaniksu; R-2, the Harney; R-3, the Kaibab; R-4, the Payette; R-5, the Plumas; R-6, the Malheur; R-7, the White Mountain; R-8, the Ouachita; R-9, the Chippewa; and R-10, the Tongass. Of these, the Malheur topped the list, with timber receipts of $244,000 and an additional $38,000 worth of timber cut in exchanges.

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According to Walter Leckrone in the "Washington (D.C.) News" of January 30, China had a CCC 4000 years ago, Egyptian Pharoahs ran a WPA, and ancient Greece had veterans' pensions and public hospitals and bread lines. "For thousands of years the Chinese government had operated a sort of CCC. Under this, any male child could be registered on the military lists at birth, draw pay until he was grown."

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Lavasdi Mahaphol of the Royal Forest Department of Thailand (formerly Siam) was a recent visitor to the Washington Office. Mr. Mahaphol was primarily interested in familiarizing himself with Forest Service organization plans, Information & Education activities, management methods, and research work in silviculture, utilization and forest influences. He stated that the Thailand Forest Department employs about 800 trained foresters, but that scientific forestry practice in Thailand is still in early stages of development. All forest lands are in government ownership, so that the Forest Department enjoys complete control over all tree cutting. High school graduates aspiring to work in the Forest Department are given a three year college course in forestry at the Thailand Forest School with expenses paid by the government. There are about 50 boys to a class. A division of research has been established in the Department but specialists are not very numerous. Fire control, wildlife management, grazing and recreation are of little or no concern According to Mahaphol there is little inclination on the part of the people to go into the forests for recreational purposes. Fishing is not a popular sport and hunting is limited to the shooting of tigers, wild bulls, and a few partridges. Sustaining the tiger population is no problem. Snakes of the dangerous variety are present in the forests but of little bother -- foresters bunk on cots when camped out, however. Travel is chiefly by railroad, on the backs of elephants, and via shanks' pony. There are few horses and no mules. Heavy rainfall eliminates the fire problem and domestic stock are kept at home. In general the problems concerning Thailand foresters are very similar to those on the Caribbean Forest in Puerto Rico -- those and the universal one of obtaining sufficient appropriations to carry on the work. Mr. Mahaphol is on a two year detail. He will visit the Forest Products Laboratory and then sail shortly from New York to Italy and from there to Burma. Previously scheduled to visit England, France and Germany he has lopped these stops from his itinerary as being "too dangerous."

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"On Top of the World" by Byron Fish, which appeared in the July 21, 1939, issue of "Fan Fare", is a very interesting and human interest story about the lives of Forest Service lookouts, in particular the lookouts in the Darrington District of the Mount Baker National Forest. The author, who visited the lookouts last summer and got his story first hand, relates many personal incidents in the lives of these men.

Mr. Fish says: "Because each is one lone man sitting on a great deal of territory, you get to know the lookouts long before you meet them personally -- that is, if you're in their neck of the woods for any length of time. You learn their names and refer familiarly to 'Whalen on Mt. Higgins' as though you knew Whalen, Mt. Higgins, from Whalen, Grover. And if the Whalen of Mt. Higgins has not the national reputation and glamour of the Whalen who impresario-ed the New York World's Fair, that doesn't mean that he isn't serving an equally useful purpose in the world."

"Fan Fare" is a magazine published in San Francisco and distributed through independent grocers throughout northern California and Nevada. The publishers state that "eventually we hope to reach the entire West but right now we circulate mainly from Bakersfield to Oregon."

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"One of the South's richest assets, and yet one of its most exploited, is its forest lands," said Dr. W. W. Alexander, Farm Security Administrator, before the Southern Conference of Interstate Problems, at Nashville, Tennessee, on January 25. "Forty percent of the nation's forests are right here in our own States," he said. "They represent tremendous wealth. And yet two years ago I watched millions of dollars of that wealth burn up, as I rode for a week through forest fires which no one was even trying to stamp out.

"Only a few days ago word came from Texas of the first Southern pine newsprint in history rolling out of the new plant at Lufkin. And on the same day, the president of a Florida paper company warned that the expansion of the pulp paper industry in the South makes improved forest management essential, if a timber famine is to be averted.

"It would be almost criminal neglect for us to fail to use our surplus workers to begin a huge restoration, reforestation, and preservation program in our forests. This is not spending but wise investment."

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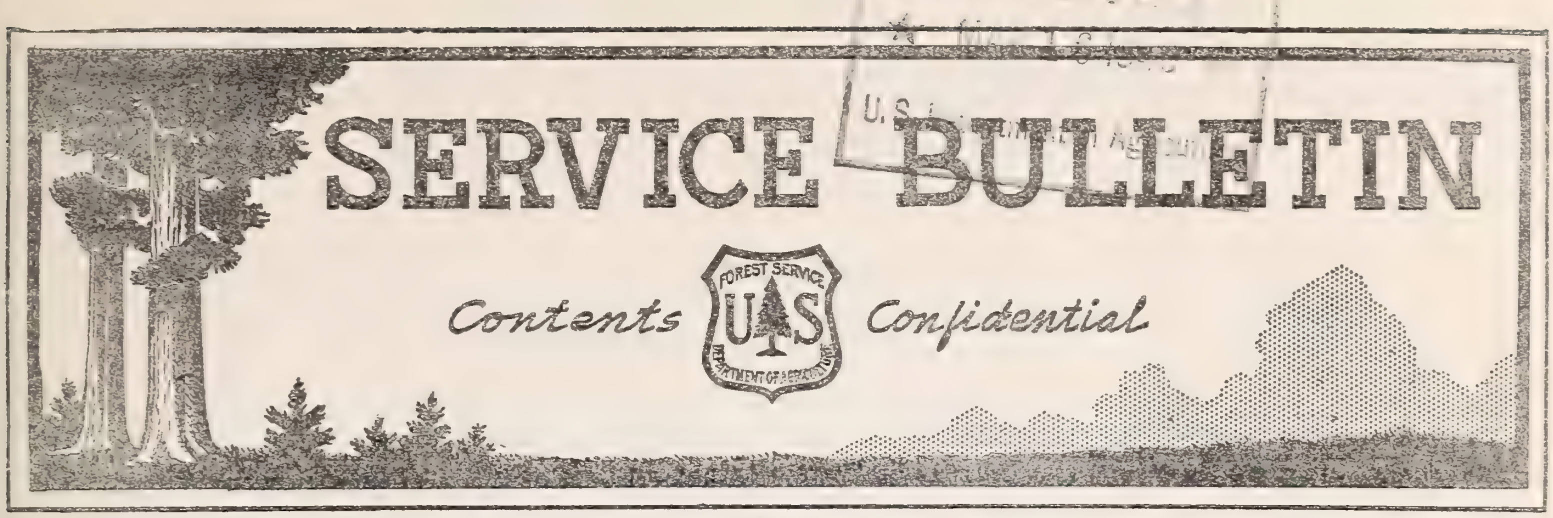

SERVICE BULLETIN

Contents Confidential

Vol. XXIV No. 5 Washington, D. C. March 4, 1940

FORESTRY LITERATURE IN THE SOUTH

By G. B. Ward, Jr., Southern Forest Expt. Sta.

Forestry is getting before the public now as never before; one interested either in forestry in general, or in some particular phase of the subject, no longer must rely entirely on Uncle Sam's publications, frequently secured through his Senator or Representative. Even a superficial local survey of the "prominence in print" of our profession and its objectives shows that right here in the South are many non-Federal periodicals that carry articles on forestry, the number of which has increased with remarkable rapidity in the past several years. These periodicals vary from the larger trade journals and conservation monthlies to the smaller news letters released at irregular intervals.

A partial list of Southern periodicals carrying articles of interest to foresters would include the following: Southern Lumberman, Southern Lumber Journal, Southern Pulp and Paper Journal, Naval Stores Review, The Conservationist, Manufacturers Record, Alabama Forest News, Forestry - Geological Review (Ga. Dept. of Forestry & Geol. Dev.), Louisiana Conservationist, Texas Forest News, and AT-FA (American Turpentine Farmers Assoc.). In 1938 the five major publications at the beginning of this list had, all told, 436 forestry articles aggregating about 450 pages (octavo size); the articles in the other publications brought the total to a much higher figure.

Many of the publications, although not dedicated entirely to forestry, carry more than an occasional short article on some phase of woodland management or forest utilization. The articles range in length from a few hundred words to detailed accounts of technical research covering several pages. For example, a casual inspection of the 1938 issues of the Naval Stores Review, the Southern Lumberman, and Manufacturers Record showed that we Southerners do not intend to be labeled the Nation's No. 1 "forestry publicity" problem; during 1938, for example, the Naval Stores Review devoted to forestry 124 articles and the Southern Lumberman, 185, while the Manufacturers Record, although published mainly for businessmen, had 18 articles of interest to foresters.

When a subject is written and talked about, people are interested in it; and inversely, when people are interested in a subject they talk and write about it. Perhaps there could be no better indication than this publicity that the South is forestry conscious. The forest industries, too--with the rapid expansion of the pulp and paper industry--are maintaining their prominence as a factor in employment and income in this vast economic empire now sorely deficient in both. Landowners are anxious for profits, labor is desirous for the utmost in income, and the public evidently wishes all the news it can get about its important timber crop.

OUR FOREIGN FORESTER VISITORS

By Jno. D. Guthrie, Washington

Prior to the present troubled overseas situation, American foresters have been visiting Europe in increasing numbers. Presumably they derive profit and pleasure, either professionally or personally, from such visits, otherwise they would not be apt to go. All such visitors see something of Europe's forests and also something of its cultural life. Europe's cities with a plethora of museums, cathedrals, art galleries, historic shrines, boulevards, and parks are visited and apparently enjoyed by the American foresters. European foresters have universally gone out of their way to extend forestry courtesies to American foresters and, regardless of how busy they may be, they plan trips and serve as guides and mentors to the visitors. The visitors usually need no forester guide for sights other than forestry ones.

I sometimes think that we American foresters are particularly inept as forest hosts to European forester visitors. Too often we are apt to look on the visiting foreign forester as more or less of a nuisance, either to be avoided or to be shunted on to some subordinate to take care of. When we prepare an itinerary too often it is made with little reference to the wishes of the visitor or his background but more to show him some of our pet projects. Trip schedules are always too tight, meaning fast travel with early starts and after-dark travel, with too great distances to allow anything but a fragmentary view of any one project. Also, generally these itineraries run right through Saturday afternoons, Sundays, and holidays, allowing the visitor little if any time to write up notes on the many new tree species, forest types, or other things in which he may be interested. And then we never include (unless he specifically requests it) anything in a schedule except Forest Service lands and projects. It would be almost heresy to show him a State park, a National park, or a game refuge, and we are even chary of letting him see a State Forest or to meet a State Forester, except on his specific request.

There is no time to show him a college or university in a town through which the trip passes, or a public building or city park, or an historic site. He gets little or no idea of the cultural life of our country. We rush him along so fast that he gets only fleeting glimpses of our scenery.

We get him up early, rush him usually to some forest improvement project, or a brand-new national or experimental forest, where too often there is no forestry visible nor any results of forest management, but instead a new bridge, new truck trail, new ranger station. He may be appalled at our millions of acres of burned-over, abused and devastated forest land, and the enormous areas of waste land. Well may he wonder whether we have any real forestry in this country, or whether we are foresters, but are rather construction engineers, only interested in physical forest improvements. Unfortunately, with us forest improvements at times seem to be the summum bonum of our forestry existence.

Usually the European forester is interested in seeing examples of actual forest management on the ground, or results of forest research, not forest improvements which are quite incidental in his forestry scheme of things. He isn't so much interested in paper plans, what we hope to do sometime, but more in results on the ground, in the forest. Our efforts probably seem pretty crude forestry to the average European forester. If we haven't a real forest to show him, we can at least show him some raw forest land, some scenery, and some evidences of our cultural life and background.

SHORT COURSE IN ADMINISTRATIVE MANAGEMENT OF CONSERVATION AGENCIES

By Henry H. Farquhar, Washington

The second 4-weeks Short Course in Administrative Management of Conservation Agencies conducted by the University of Michigan School of Forestry and Conservation under the direction of Dean S. T. Dana closed on February 24.

Professor George C. S. Benson, director of the curriculum in Public Administration, was leader of the morning sessions on the subjects of organization, working plans, supervision, personnel management, budgeting, and allied subjects. Afternoon sessions were devoted to public speaking, business organization, debates on the Fulmer and other bills, presentation of problems on land exchange to a board of county commissioners, report writing, psychiatry, and the like.

Of the 15 foresters in attendance, eight were from Region 9, two from Region 2, one from the Michigan Department of Conservation, two from the Michigan State CCC, one from the Ohio State CCC, and one from SCS (Michigan). The men paid their own expenses and tuition and used annual leave in order to take the course.

It was my pleasure to visit the first two weeks of the course and I was tremendously impressed with what this course is evidently doing for the men and the agencies they represent. The meetings, it seemed to me, were conducted in an exceedingly practical and useful manner. They consisted of discussions of actual cases, interspersed with lectures. The men themselves seemed enthusiastic in their estimate of the value received from the work. Many of them said that they had already secured several ideas which they could take home and put to immediate use. The course is considered a particularly significant development in after-college training.

THE RANGER'S PAPER WORK LOAD

An article in the February 6 issue of the "Northern Region News" entitled "The Papyrus Affray" contains some interesting information regarding the time required on an average ranger district in handling the paper work load. According to the article, an accurate record of the amount of correspondence received and sent was kept for the Stevensville Ranger District--on which the paper work load is believed to be no heavier than that on the average ranger district in R-1--during the one-year period May 1938 to April 1939. This record showed that the incoming mail numbered 2,351 pieces (8,345 pages) and outgoing mail 2,278 pieces (3,655 pages) or a grand total of 4,629 pieces (12,000 pages). Incoming mail counted included some pamphlets and booklets, but nothing was counted that was not considered of sufficient importance to be read by the ranger. No large books, bulletins, or pamphlets of a general informational nature were included in the count.

"Allowing only three minutes per page for reading and digesting the average page of incoming mail," the article continues, "the total time absorbed by this one phase of the ranger's job amounts to 417.3 man-hours; allowing seven minutes per page for writing, compiling or otherwise handling outgoing paper work amounts to a total of 426.4 man-hours. It is believed that the three-minute time-consumption figure is conservative due to the fact that many pages of incoming mail require several times that amount of time for reading and thoroughly digesting; likewise, the seven minutes set up for outgoing mail, since the data contained in many letters and reports often requires hours of additional office time in preparation.

"Now let us turn to the modern, streamlined ranger work plan for further time figures and carry on with our calculations. Work plans are based upon a seven-hour day, for office work, and a 30-day month. Deducting four Sundays, four Saturday afternoons, and 2$\frac{1}{6}$ days' annual leave from each month, we have approximately 153 hours left for office work.

"The foregoing data leaves us with but one conclusion, that the average ranger must spend 5.51 months just 'reading and writing' unless he violates personal rights (and present-day 'overtime' and work hours policies) by carrying on on Saturday afternoons, Sundays, and 'burning midnight oil'."

DANVILLE COMMUNITY FOREST RECORDS

By Ernest O. Buhler, Washington

A few musty leather-covered books were recently found in Danville, New Hampshire. They date back to 1694. The pages are yellowish with age, fine dust has collected between the leaves and the ink has faded in many places. The writing too is sometimes difficult to make out. In those days no Webster had standardized the spelling and words were often written according to sound. Most nouns began with capital letters and no punctuation was used. Sentences simply rambled on without commas or periods and thus the books contained entire pages written all in one sentence.

However, the subject matter in these books is of engrossing interest. These old pages contain a moving drama of the community life and its part in the life of the young republic. The Danville records also bring a new light to happenings that every American is familiar with. Those cryptic minutes of the town meeting at Danville bring out in a dramatic way, if you read between the lines, one reason why the Continental Army won the Revolutionary War.

These artless sentences, as put down by successive generations of town clerks, show in a surprising way the evolution that has taken place. It pictures the changes from a frontier wilderness to a prosperous village of today; the care of the poor who were sold out each year to the lowest bidder, to the present method of taking care of them; the changes in our school system, from three months' schooling per year in 1760, to the present standards; the rise of labor from ten cents per hour to its present scale; the method of securing soldiers for the defense of a community during the Revolutionary War, the War of 1812, the war between the States and the Great War; and the helpful part played by its community forest from 1760 down to today.

Side by side with these changes, the community forest has remained the same and yielded its revenue. That and the form of Government has not changed. The record will show how both were managed and what the result of this management has been. It might be of particular interest to Foresters because this is probably the only authenticated record on forest management in America extending back over one hundred years. From time to time, therefore, the Service Bulletin will print stories which these records tell.

THE PROFESSORS TELL U. S. PRESS AGENTS HOW TO DO THE JOB

From Alfred Friendly's Column "The Federal Diary" in the "Washington (D.C.) Post"

The publicity directors of the five establishments comprising the Federal Security Agency have just been instructed by the professors on how to write readable copy. Their comments do not bear repetition.

Writing a good article or pamphlet or press release is a cinch, they were told. All you have to do is follow this formula:

X (one) equals minus .01029X (two) plus .009012 (five) minus .02094X (six) minus .03313X (seven) minus .01485X (eight) plus 3.774.

It's all part of a system worked out by two Ph. D.'s from Chicago in 10 years of research. It was expounded to the information directors recently at one of the weekly meetings held for the good of their souls.

Expositor was the Office of Education's B. P. Brodinsky, who told how the system works. It's something like this:

There are "easy words" and "hard words". The former are words known to every kindergarten student. The latter are words a kindergartner doesn't know. The more often they are used, the more difficult the story is to read. Except that if you use the same hard word several times it becomes an easy word.

The more personal pronouns used, the better. The more prepositional phrases used, the worse. The more words per sentence, the more difficult. Words beginning with "w", "h" and "b" are swell. Words beginning with "e" and "i" are terrible. Words carrying strong visual images like "chocolate sundae" and "Ann Corio" are dandy. Words like "eschewed" should be eschewed.

All these factors are carefully weighted and reduced to the "X's" in the formula. The rest is easy.

On this basis, Brodinsky scored samples of copy from one publication of each of the five Federal Security Agency offices. Frankly, they were terrible.

Compared to a first grade reader, which scores 2.06, the Office of Education pamphlet scored only .58, the Civilian Conservation Corps publication scored .56, the Employment Service document, .26; the Public Health Service pamphlet, .19, and a brochure of the Social Security Board only .09.

It just happens that the low-scoring SSB material was prepared by Miss Ethel Smith, a young lady who also wrote a pamphlet some months ago to accompany all applications for old-age benefits.

It began, "There is now a law in this country which gives about 26,000,000 working people something to live on when they are old and have stopped working."

The New Yorker magazine, choosy judge of fine language, pounced on the release as "something of a Government record" for simple and good writing.

"It's the sort of thing Abraham Lincoln might have penned if he thought of it. It carries the faint, troubling vibrations of great prose," The New Yorker said.

Take it away, professor !

TEN YEARS AND HALF WAY

By R. D. Garver, Washington

Ten years ago this spring a selected group met in Madison, Wisconsin, to lay the foundation for the Nation-wide Forest Survey. A list of those present contained such familiar names as Clapp, Marsh, Granger (First Survey Director), Zon, Winslow, Munger, Behre, Show, Kotok, Munns, Demmon, Girard, and more than a dozen others. This group recommended that the Survey investigate all phases of the forest situation and submit recommendations. Technical committees for each phase of the investigation submitted reports to guide the study.

Field forest inventory work was started in 1930 on the West Coast and has since been extended to the Inland Empire, Lake States, South and Appalachian regions. The forest products requirements phase on a national basis was begun shortly thereafter with leadership in Washington.

Some 288 million acres of forest land - about half the job - have been covered. Analysis of information and preparation of reports for the area studied is about two-thirds completed. One hundred and fifty seven reports have been released - 4 through the Government Printing Office, and 153 through the duplicating rooms of the Stations and Washington Office. In addition numerous articles have appeared in technical and trade journals and as unpublished papers read at conservation meetings. To supplement these reports forest type maps have been prepared and lithographed for all or parts of twelve States. Widespread demand for Forest Survey information and for extension of the work to new areas continues, which leads to the real problem facing the project - how to cover the rest of the country quickly, say in the next 5 to 6 years, and at the same time keep the Survey up to date for the area covered. In order to do this additional appropriations will be necessary. Before additional funds can be obtained an amendment to the Forest Survey section of the Act of May 22, 1928 will be required, because present appropriations are up to the limit of the Act. Bills S-224 and H. R. 3410 already introduced in the 76th Congress contain such an amendment.

THE PRAYER OF THE WOODS

An 80-year-old listener of "Uncle Sam's Forest Rangers" radio program recently submitted what he calls the "Prayer of the Woods." It reads as follows:

"The Prayer of the Woods: I am the warmth of your home in cold winter nights, the protecting shade when the summer sun burns. I am the roof of your house, the board of your table. I am the bed in which you sleep, the handle of your hoe, the door of your hut. I am the wood of your cradle, and your coffin. I am the flower of beauty, and goodness itself. Heed my prayer; do not destroy me! Amen."

FAN LETTERS ON NINTH ANNIVERSARY RANGER RADIO PROGRAM

The following excerpts are from some of the letters received in response to the Ninth Anniversary program of "Uncle Sam's Forest Rangers" on January 5:

"It was so good to reminisce with you all today. Well do I remember Jerry's first appearance on the air, but in spite of all of Jim's ribbing he won all of our hearts along with Mary's, and when he left I could have bawled. Glad he is back, and everyone of you that take part are real friends and have brought me to love and enjoy our trees and forests so much more. Here's hoping your part along with the whole Farm and Home Hour will come to us for many more years." -- (Mrs. Frank Overhiser, Bath, N. Y.)

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"Thanks for the wonderful entertainment I have been getting from your programme. To one who has spent an active life, much of it in the open, and now a semi-invalid, your little sketch each week comes as one of the bright spots in life. One gets to feel that they would like to know all of you better, though I do feel that I have met you all. Yes, Ranger Jim, Jerry, Mary and Mrs. Robbins seem to be among those I have known a long time.

"As Jerry gets a little older, and the rest of you do not, I follow your fortunes, share your adventures--yes, occasionally wipe away a tear when you pull one of those 'tear jerkers.' I often think I'd like to meet and know you better. Oh, darn it; what I want to say is, I think you are GREAT and I'm 'For You.'" -- (Val E. Dombaugh, South Jacksonville, Fla.)

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"Congratulations on your 'anniversary' broadcast this week. Your program is one of the most enjoyable on the air--fine, clean, and very instructive. Our best wishes to Jim, Jerry, Bess and Mary. May you continue this program indefinitely." -- (Mrs. Caroline Anderson, Chicago.)

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"You belong to us and we know you--so glad we do know you. We belong to you but you do not know us, except as our thoughts and letters affect you. We are 'rangers' too but not Forest Rangers. Wish we were! Long live the Forest Rangers." -- (The Mercers, Glassboro, N.J.)

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"When I heard Everett Mitchell announce on the radio while on Farm and Home Hour that this started your ninth radio program, I want you to know that I look forward to your part (Ranger Jim) on the program as well as the rest of the cast. Have heard you since your first broadcast, and have enjoyed your part on other programs. I have a 19-year-old son, and he thinks he would like to be a ranger." -- (Mrs. Vera Monroe Lyon, Columbus, Ky.)

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"Thank you for starting the Forest program. As we had no radio until the last year or so, off and on we listened in on our neighbor's. We love the Forest stories as told by Jim and Jerry and Mary. Now we will hear how it all started. It is all so interesting and enjoyable;

the forests seem more worth while since we hear about them, and the Rangers and people there... We love Mary--she is so gentle to the children, and so sweet to Jerry. It all shows us life among the Forest Rangers." -- (Mrs. Anna Tenny, Lake Forest, Ill.)

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"Congratulations to your Forest Rangers family--Jim, Bess, Jerry and his sweetheart Mary. We have grown to love these four fine people. We wish them 'lots of good luck and a happy New Year.'" -- (A. Richards Family, Chicago.)

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"We look forward with great pleasure to each Friday's broadcast, as we have for years and are now watching with keen interest the romance between Mary and Jerry." -- (Chas. E. Korfhage and Family, Kansas City, Mo.)

PROGRESS IN CCC PERSONNEL TRAINING

By G. H. Hieronymus, Washington

Camp personnel, being faced with the difficulties of the supervision and training of enrollees, with the assistance of local supervisory offices, are developing their own training programs within the camps to meet their special needs. Reports received during the past year from the 626 Forest Service camps reveal that an average of 257 organized courses in foremanship were given each quarter.

These courses, developed around the processes of supervision and training, are often open to enrollee leaders who must share supervisory responsibilities both in camp and on the project.

More than 80 percent of Forest Service supervisory personnel attached to camps teach leisure-time classes, and although all these instructors are well experienced in the lines of work they do, practically none have had formal teaching experience, and few had conducted systematized job training previous to their entrance into CCC. To meet deficiencies and to improve their contribution to enrollees, many of the foremanship courses are devoted in part to instructor training. Or they have been followed with a complete course in methods of instruction.

The training manual, "CCC Foremanship", prepared by the Regions and by the Division of CCC Enrollee Training, has been received well by the camps. Requests for additional copies have been so numerous that the publication is being reprinted. This booklet has been used as a basis for study and discussion groups in many of the camps since its distribution last summer.

Progressive steps in CCC training have been made recently by Regions 1 and 2 by initiation of correspondence courses for camp personnel. The course being given by the Missoula office is based on "CCC Foremanship" as a text, and an examination of two or three sets of questions of the short answer type will be given to personnel taking the course. The study course prepared by the Denver office is similar to the course for Manual Examinations now given to regular employees. All facilitating personnel except mechanics, machine operators, and blacksmiths will be required to take the course, and examinations will cover general administration, fire protection and fire fighting, equipment and supplies, finance and accounts, safety, and construction and maintenance.

Foreman training in the camps has been in practice since early in CCC history. Regular meetings of personnel to discuss supervisory, technical and safety problems have been necessary all along, but recent trends toward broadening this training to include better supervision, better job training, and better classroom instruction are evident. Visits to some of these training meetings, planned and conducted by the camp personnel alone, reveal high interest in self improvement toward more efficiency, and good understanding of the principles of supervision and training.

PENNSYLVANIA COMMUNITY FOREST COUNCIL

"Under sponsorship of the University of Pennsylvania, in cooperation with State and Federal agencies, there has just been set up the Pennsylvania Community Forest Council, which some of its members hope may be the forerunner of a nation-wide program of forest conservation. The Council, headed by Professor Charles C. Rohlfing, Chairman of the Department of Political Science at the University, represents the first attempt in this country to study forestry from the political science point of view....The Council aims to interest local units of government in the proper management of community forests, which are defined as woodland tracts owned by a township, borough, city, county, or other local governmental unit, and used for the benefit of its citizens. The benefit may be social, economic, or financial, with the forests managed for recreational or watershed purposes and perhaps 'farmed' for regular timber crops at the same time." (New York Times, 2/11)

(According to an item in the "Philadelphia Ledger", the Council was inspired by the recent Forest Service Bulletin "Community Forests" by Nelson C. Brown, which contained a Foreword by President Roosevelt. - Ed.)

THE EDITOR DISCOVERS

A review of Forest Land Planning records in the Washington Office shows that of the 164 approved Soil Conservation Districts for which the Department has entered into a formal Memorandum of Understanding 26 of these Districts include lands within the National Forests or Purchase Unit boundaries.

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Oglethorpe University, Georgia, plans to preserve a record of our present-day civilization for the people of A. D. 8113. In a stainless steel crypt beneath the administration building of the University will be deposited models of modern inventions, phonograph records of speeches by the leading men of our time, motion pictures, microfilm copies of the world's best books, and actual objects used in our daily life. A long-life type of cellulose acetate film (made from wood or cotton cellulose) is being used, and it is estimated that this film will last 6,000 years.

Seeds and bulbs of our present day flora also will be placed in the vault. The seeds will be enclosed in glass ampules filled with nitrogen and hermetically sealed. Each ampule will have fastened to it a label giving the common name of the plant, the Latin name and a numerical classification which will refer to a picture and description in the books on trees, plants and flowers which are being microfilmed for inclusion in the crypt.

A recent bulletin from the University which describes the project states that gifts are still being received.

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In response to the invitation contained in Mr. Loveridge's article "More On In-Service Training" in the Service Bulletin for December 26, a committee of six girls in the Washington Office has been working on an "In-Service" training program for new clerical employees.

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More than 200 schools of all classifications offered direct assistance to Civilian Conservation Corps enrollees during the first semester of the current school year, according to a press release recently issued by the Director's office. Eight hundred and thirty-one enrollees benefited from this direct assistance, which was in the form of scholarships, part-time work, remission of fees and similar types of aid. In most cases the enrollees were honorably discharged from the Corps in order to devote their full time to school work. Others studied part time and and remained in the Corps. Of the total number of CCC students, 564 of them attended college and 267 took courses in high schools, grade schools or technical institutions.

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A special edition of "The Lufkin Daily News" prepared in celebration of the opening of the Southland Paper Company at Lufkin, Texas, last month contained a section (Part D) devoted to forestry activities of the State and Federal Governments, with the U. S. Forest Service receiving a very creditable amount of this space. Distribution of this special edition was made to every State in the Union, and it is felt that the resulting recognition given to the activities of the Texas National Forests is very noteworthy. "Credit for this work," Region 8 reports, "goes to Ranger Lorenzo Jared and the Texas Supervisor's office."

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Mrs. Olivia Reynolds Fernow, 87, widow of B. E. Fernow, the first chief of the Division of Forestry of the U. S. Department of Agriculture, from 1886-1898, died February 12 at the home of her son Carl H. Fernow, near Ithaca, New York, where she had resided for the past three years. She had been seriously ill since before Christmas.

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The following employees retired from the Service during February:

James H. Baldwin, Forest Ranger, Dixie Forest, R-4
James Jensen, Forest Ranger, Fishlake Forest, R-4
William L. Jones, Forest Engineer, Rogue River Forest, R-6 (disability)

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SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 6 Washington, D. C. March 18, 1940

MANAGING WOODLANDS FOR PINON NUTS

By Elbert L. Little, Jr., Southwestern Forest and Range Expt. Sta.

Pinon nuts are being included in the new research project of the Forest Service on management of southwestern woodlands. By providing employment each autumn to several thousand pickers, chiefly Indians, Mexicans, and others of low income groups, these wild nuts contribute to the economic and social progress of many communities. Until recently the scientific possibilities of pinon nuts have remained almost untouched.

Woodland forests of trees below saw-timber size, mostly pinons (nut pines), junipers, and oaks, cover about 28 percent of the total area of New Mexico and Arizona, or more than 42 million acres, as well as smaller areas of adjacent States. While the wood is good fuel and is cut locally for mine props and other products, the most valuable products of pinon trees are the edible seeds or "nuts," which, like large seeds of pines in other parts of the world, are used as food.

Southwestern United States has four species of pinons or nut pines, dwarf, scrubby trees characterized by wingless seeds one half inch or more in length. Of these, pinon (Pinus edulis) is the most valuable and the one being studied, singleleaf pinon (P. monophylla) is of lesser importance, and Parry pinon (P. quadrifolia) and Mexican pinon (P. cembroides) are of restricted occurrence.

As the principal wild nuts in this region, pinons were a staple food of the Indians and were mentioned in reports of the earliest Spanish explorers 400 years ago. The modern pinon nut industry has developed gradually during the present century and is the outgrowth of the familiarity of persons of southern European origin with the similar pignolias (P. pinea) of Europe. Most of the nuts are marketed, roasted, and unshelled in New York City and other eastern cities under the name of Indian nuts. A small but steadily increasing quantity is sold shelled and in candies. According to chemical analyses these rich, oily nuts rank high among nuts in food value.

Pinon nut crops are not annual but are irregular, infrequent, and usually local in area. In a particular locality the interval between good crops may vary from 2 to 5 years or sometimes more than 10 years. However, in the vast area there is a good crop somewhere nearly every year, and occasionally bumper crops are widespread. The annual harvest in New Mexico, Arizona, and Colorado usually reaches 1 or 2 million pounds or more, but the bumper crop in 1936, the largest ever gathered, totaled about 8 million pounds. At 10 cents a pound paid to pickers and 25 cents retail price, values of each crop are $250,000 to $500,000 or more.

The research project has been started to develop the best methods of management of pinon stands for maximum sustained nut production along with other woodland products, such as fuel, posts, forage, and water.

A map of areas producing commercial pinon nut crops is being compiled to aid pickers and dealers. Instructions for recognizing the early stages of cones have been prepared to assist in locating areas with immature cones and in estimating the crops in advance. It is even possible to distinguish primordia of cones in buds two full years before maturity. Early each year the forest rangers cooperate by reporting the various localities on the National Forests which will have a good nut crop. There are no restrictions for picking pinon nuts on Government-owned lands, but private landowners make a small charge.

A greater portion of the crops could be gathered through improved methods of harvesting. Present methods are slow and crude, such as picking the nuts off the ground by hand, or sweeping up the nuts and screening to remove litter. Better, inexpensive mechanical aids and seed-cleaning equipment should help. However, perfection of elaborate mechanical pickers would displace the present unskilled labor and thus eliminate the desirable feature of providing employment.

At a climatic station the stages of growth of trees and their cones and nuts are recorded in relation to environmental factors. Microscopic details of formation and development of buds, cones, and nuts are being studied. Some developing cones are destroyed by insects, and many ovules abort at various stages to form empty or "blighted" nuts.

Growth of pinon trees is extremely slow, only 2 to 6 inches in height a year, and average height at maturity is only 15 to 25 feet. A tree has its first cone at about 25 years but does not start to bear well until about 75 years old. Natural reproduction, probably aided by rodents, in general is adequate except in a few places severely overgrazed by sheep.

Factors affecting cone crops are being investigated. Simultaneous bearing of the trees in a locality at irregular intervals suggests the possibility that certain variables in weather conditions affecting all trees alike may be important. It is planned to study also the soil nutrients and food reserves of the trees in relation to bearing.

Various silvicultural methods are being tested in attempts to find inexpensive treatments that can be applied to the better stands of wild trees to increase production and regularity of bearing. These treatments include thinning, pruning, cultivating, ditching, irrigating, and application of fertilizers.

Through tree genetics superior varieties for artificial propagation perhaps could be developed in time. Variation in size of nuts from different trees is a basis for selection, and the better qualities of different species could be combined through hybridization. Production of polyploids is a possibility. Improved varieties might be propagated vegetatively on existing wild stocks or planted in orchards.

"ALL SWEETNESS AND LIGHT"

By Jno. D. Guthrie, Washington

Once upon a time, long ago, the average ranger station was located out in the sticks. Maybe it was of logs, maybe boards. It was cramped, in a way, and had none of what we consider modern necessities for bathing or "washing up" before supper; even the drinking and cooking water came from a spring, or luckily from a nearby well. Maybe it smelled a bit of sweaty leather, and pine smoke. But it was a ranger station, where a he-ranger lived, and where you got a real welcome, from the ranger and his wife, both woodsy and wholesome. After supper you sat in the living room (maybe it was the "office" also), while the fireplace or heater threw out comforting and comfortable rays of heat. But that's all gone, gone with the New Deal winds!

The above may sound a bit nostalgic for the old days and the old ways -- with their inconveniences and discomforts. However, I am strong for all modern living conveniences possible for the ranger and his family; I have always been, even up to the old building limitation of $500! I'm strong for running water in the house, a good roomy sink, lots of closets, and a bathroom, even a furnace in the basement, -- and a fireplace.

We've gone far from the old-time station and we won't shed tears over it, though I confess with all its deficiencies it smacked of the woods and forest and outdoors. It seemed somewhat to fit into its surroundings; it had an atmosphere all its own.

But today? Well, recently I had a letter from an old-time friend of mine, for many years now no longer in the official family. He has been out on a forest with his family. They stayed in a modern ranger's house and the Service folks were hospitality itself to them, and he appreciated it. But this is what he wrote me:

"He lives in a Forest Service 'Ranger Station' -- Lord save the mark! It's more like a country estate than the $500 ones we used to build on Clear Creek! Only these nice residences are no longer Ranger Stations; they are clipped out of the Ladies Home Journal! It's time the Forest Service got an architect who can draw something more than sweetness and light into a Station plan."

This old-time friend of mine has put into words what I've long been thinking -- "sweetness and light," but no longer ranger stations! Town houses, of "cookie cutter" architecture as Silcox used to say, good looking and proper for a small town or a city suburb, but not ranger stations. Maybe it's all because we've moved the Ranger and Mrs. Ranger into town. Maybe it's because we've showered him with an office and storeroom, a 2-car garage, a whaling big storage building, a tool house, a bunk house (some Forests even call them "guest houses" nowadays!), a truck and tractor shed, and no telling how many other buildings! The sign on the gate or the front lawn may read "Ranger Station," but it's not a Ranger Station, -- it's a house where a Government official lives.

Inside? It has a living room (likely no fireplace), dining room, several bedrooms, nice big kitchen, sink, hot and cold water, bath-shower and tub, -- and a basement -- but it just isn't a ranger station. There isn't a single thing about it, inside or out, that looks like or feels like a ranger station. It's clean, neat, with waxed floors, polished furniture, "arty" pictures, fancy carpet or rugs; it's got all the modern gadgets. But it isn't a Forest

Ranger's Station, not a suggestion of the woods or forest, not even one of the old Forest Service enlargements in a dark brown frame on the walls! Nostalgia? Maybe so. But let me repeat, I'm strong for all the modern conveniences it is practicable to have on the site, but can't we have some kind of an architecture that at least suggests the forest? Hunting lodges, rustic bungalows, or chalets as types all have their place, and maybe all these are too fancy — but I've seen fancier designs in more than one modern ranger house. Log houses? Out of place except in the woods. Shingle-covered or shake-covered sides? They have their places — stone, plaster or adobe houses. They too have their places. Timber and plaster English type? I've seen some good looking ones. I am not an architect but at the same time I think some of our modern ranger houses are of most inappropriate design, or inappropriately placed, some are too utterly fancy, — and some are just plain ugly.

I never favored a standard design for all Regions; that is totally impracticable if not impossible. I wouldn't even have one standard design for one Region; a design for western North Carolina wouldn't fit in southern Mississippi; and a Minnesota model would look out of place in southern Illinois. But there are many local designs or types of houses that "belong" in different parts of our big country, and surely an architect somewhat familiar with forest conditions and backgrounds, and with some imagination, could work out some pleasing designs for what at least suggested a forest dwelling, a forest home, a forester's home, a ranger station, — at least on the outside. Keep the modern conveniences inside but give us something that has something of the forest about it.

Too late, you say, — we're about through our building boom? That may be partly true, but the Forest Service will still be building some houses for its field men for many years; we'll always be building a few.

"All sweetness and light."

TRIBUTE TO CCC FOREMEN

(Extract from Director Fechner's 1939 CCC Report — pp. 68-69.)

"Looking back over the 6¼ years of the Corps and the practical accomplishments during that time, the results have been tremendous. This is especially true when it is remembered that the labor was young, raw, and untrained, and not only had all work projects to be planned for, but the young workers used had to be trained, in how to work, how to use tools and machinery, and how to work with safety to themselves. The training of this raw labor force fell on the supervisory and facilitating personnel in the camps — the project superintendents, the foremen, the technicians — and great credit is due them not only for large work results but having accomplished these with raw labor. It is a tribute to their skill, patience, and thoroughness through the past 6 years.

"It is also well to remember that here were young men who not only had to be trained in work skills, but who had to be guided and advised, cautioned and warned, in their daily work and also in their daily lives. The CCC superintendents and foremen have constructed many thousands of physical improvements; they have also built up hundreds of thousands of human characters. These were no 'made work' jobs, nor was the character building a play job. The CCC youth soon learned that the daily job he did was a serious job, to be done according to plan and specification, it had to be well and permanently done, it had to stand up, and that he as well as his foremen had a responsibility for an honest job. Here was work training which would fit him for an outside job later on, which would better fit him for life. Here was conservation of both physical and human resources."

APPROVED CHANGES IN SUDWORTH'S CHECK LIST

By Daytonius, Washington

On January 23, 1940, the Forest Service Tree Name Committee, of which the erudite Dr. H. L. Shantz, Chief of the Division of Wildlife Management, is our distinguished Chairman, submitted for approval a revised list of proposed changes in Sudworth's Check List. This was approved by Acting Chief C. M. Granger January 24, and a mimeographed 98-p. report, "Approved Changes in Sudworth's Check List," appeared "from press" March 2, 1940. These amendments are now official. They embody 414 changes in English names and 30 in Latin names of Sudworth's Check List. In addition, 202 species hitherto unnamed are now provided with English names; 74 misspellings and typographical errors are corrected; 9 errors in citations of botanical authorities are corrected (this by no means completes the list that should be corrected, as the Committee made no special effort to check and correct items of that sort); 30 Standardized Plant Names are added to the Check List names; 3 lumber-trade names are also added to the accepted English names; 6 untenable species and varieties are deleted, and 7 valid species and varieties are added.

By and large, the average grown-up human animal is a bit conservative. From habit he rather tends to frown upon "queer" folks who like to "monkey" with simplified spelling, revision of the calendar, decimal weights and measures, and the like. In short, what we are used to we are used to. The first natural reaction to changes in names to which we have grown accustomed is likely to be one of irritation. Folks are apt to think that the Big Boss should give that Tree Name Committee sextette in Washington some real work to do, to keep them out of mischief.

The genesis of these changes was as follows: In the spring of 1938, the late Maj. Silcox was approached by Mr. Harlan P. Kelsey, Chairman of the Editorial Committee of "Standardized Plant Names", requesting that the Forest Service Tree Name Committee be asked to cooperate with the American Joint Committee on Horticultural Nomenclature in ironing-out, so far as possible, the very numerous differences in tree nomenclature between Sudworth's Check List and S.P.N. (new edition of which is to go to press July 1 next). Maj. Silcox had the type of mind which could grasp the essence of a situation in a moment; no lengthy argument was needed to "sell" him the obvious. He saw at once the incongruity of the Federal Government having two accepted nomenclatural standards that differed as much as (or more than) they agreed. Moreover, he was free from the provincialism which characterizes some otherwise estimable men one sees in high places. He knew that trees are of worldwide interest and concern and to many kinds of people; and not alone to the U. S. Forest Service and professional foresters, and that widely accepted tree names may sometimes be misleading, incorrect, and homonymous. Mr. Silcox gave his hearty and unequivocal endorsement to Mr. Kelsey's proposal. As a result, Mr. Kelsey and I spent about two weeks of intensive preliminary work during June and July, 1938, the results of which were put up to the members of the Tree Name Committee in an extensive series of memoranda from July to December, 1938. Each member of the committee returned a carbon of each memorandum sent him, recording his vote on each item. All proposed changes that were not unanimously accepted were then discussed in a series of committee conferences in Chairman Shantz' office. From these conferences resulted the T.N.C. 104-p. mimeographed report of May 20, 1939, "Proposed Changes in Sudworth's Check List", with an introduction going into the philosophy of English plant name standardization, and including a statistical table of the changes proposed. The numerous criticisms and suggestions received from the field and from cooperating individuals and agencies outside were abstracted in an 89-p. mimeographed memorandum issued September 23, 1939. These criticisms and suggestions necessitated further conferences of the committee, and from these has developed the final report of January 23, 1940.

Agreement with S.P.N. has now increased from perhaps about 40 percent to over 95 percent. It would be a pleasure to record that the agreement is 100 percent; this writer hopes that eventually that goal may be attained. The differences are, for the nonce, covered by double names; thus both the S.P.N. name Eastern Larch, as well as the C.L. name Tamarack are listed for Larix laricina. Basswood (F.S.) and Linden (S.P.N.) are both listed for the genus Tilia, and Sycamore (F.S.) and Plane (S.P.N.) are both listed for Platanus. At some future date, we hope, majority usage will simmer down to one English generic name for Platanus and Tilia. The one serious discrepancy left is Silver Fir, a name which Forest Service people insist shall stay with Abies amabilis, while the Silver Fir of horticulture is A. alba of Europe; something must yet be done about that, but we will probably have to wait until feeling mellows a little on both sides. "Time," Carlyle says, "brings roses" — maybe the old boy with scythe and hourglass will bring firs too!

The Tree Name Committee is toying with the idea of publishing a straight alphabetical tree list of U.S. tree names next winter. Meanwhile, 1st Thessalonians 5:25.

HOW DO YOU LIKE YOUR WOOD?

By E. N. Munns, Washington

So asks Cochran of Region 2 in the Service Bulletin of January 8. I like mine in boards that are relatively free from knots although as a kid I did look for openings in the fence around the ball park.

This answer to Cochran was inspired by Munger's "Thirty Years of Tree Growth." Picture a fine 84 year-old second-growth stand now at or approaching normality with clear length of 5.4 feet. That's just about enough clearance to permit the logger to swing an axe without losing an ear or the pixies to dance without getting a twig in their eyes. That clear length gives a nice clear stump but unless I'm mistaken greater returns may be expected from clear logs than from clear stumps. We foresters are an odd lot; we talk of quantity so much and of quality so little.

Munger also hopes a market can be found "for piling, mine timber, or small saw timber." The emphasis would appear to be on "small" for one would expect that while the log scale might be high, the amount of salable lumber obtained would be small even in the East where logs are sometimes just so much a dozen. Of course, if this stand grows another 30 years at its present rate, the best trees will have grown another 3.6 inches in diameter or 1.8 inches in radius just about sufficient to provide some nice clear slab wood unless converted into clothing a la Cochran.

All this makes us wonder about those other forests we have been planting in the last ten years or so with 250 to 400 successful trees per acre in them. One wonders if they too at 84 years will be approaching normality in volume and basal area while we still hope a market can be found for piling, mine timber or small saw timber. One saving grace is that not all such planted stands are of species that are slow to clear themselves. Another that Dame Nature will fill in some of the blanks. Another is that perhaps all such forests have been planted on Site I land where knots are fewer to the thousand. Yet, one must wonder just the same.

We can be thankful that while "earning a high rate of interest in quality and quantity production" (we are not told what this rate is) these stands do not add to the fire problem. And one might add water as well! Undoubtedly the Willamette will be quite a forest when it grows up, but even so the public may join me in liking its wood better when knot-free and its forest better when normal at an early age.

SOME FIGURES ON EMPLOYMENT OF CCC ENROLLEES

By H. R. Kylie, Washington

Information submitted by Project Superintendents of the 629 CCC camps of the Forest Service reveal that during the last three months of 1939 a total of 3,144 enrollees left these camps to accept jobs. This was an average of five per camp for the quarter, or almost two per month. The New England States, where present opportunities are greatest, lead in employment with 11 per camp, and Region 3, where there are fewer opportunities, reported the lowest number of jobs found, with two per camp.

The largest groups of boys in Region 5, 7, 9, and NEFE headed to factories, with the next highest number finding jobs as construction laborers in 5 and 7, as truck drivers in NEFE, and with the Army and Navy in 9. Truck drivers led the procession in Regions 1, 3, 4, and 8, with mining following in 1, mill and factory work in 3 and 4, and Army and Navy in 8. Construction labor needed the largest group in Region 2, and farms and ranches got the most in Region 6. The second largest groups in these two Regions got jobs as truck drivers.

Jobs in factories and mills topped the list for the whole country with 467, helpers and laborers on construction work was second with 339, and truck drivers, which formerly has been first on the list, came in third with 305 placements. Other types of employment in which the boys got the majority of their jobs are in order, farming, clerical, retail store, mining, service station work, auto repair, cooking and baking, logging, guard service, and carpentry.

Boys who accepted these 3,144 jobs are receiving average wages of $71.22 a month. The highest average for a Region was $88.06 and the lowest was $58.43. The Army, Navy, and Marines accepted 239 enrollees during the three months, but the pay received by these men was not considered in determining the average.

During the same months of 1938, only 1,909 enrollees, or 3 per camp were discharged to accept employment.

There are no reliable figures on the employment of enrollees after they leave the Corps, and there seems to be no way to secure valid records of their status after they have been discharged for some time. However, it is believed that a good many more get jobs, of which we have no record, soon after discharge than find employment while they are still members.

MASS EXODUS FROM WORNOUT LAND SEEN

From the "Washington (D.C.) Post" of February 13

The Russell Sage Foundation published an estimate yesterday that "substantial" mass migrations from four large areas in the United States may be expected as a result of land problems.

The areas are the cut-over region of the Great Lakes, the southern Appalachian coal plateau, the submarginal farm lands in the Great Plains and the old Cotton Belt. Estimates suggest that a migration of from 1,500,000 to 6,000,000 may be necessary from the old Cotton Belt alone.

The report, prepared for the foundation by Philip E. Ryan, views migrants as "a group of average persons with no greater tendencies toward unsocial behavior than prevail in the general population."

Ryan said a chief source of trouble for distressed migrants lies in "antiquated and local settlement laws."

"A citizen of the United States all his life, a migrant may find himself a citizen of no State, unable to benefit by many of the provisions which are by law the right of his fellows," Ryan said.

"Moreover, the community in which he finds himself so stranded is usually unwilling to render special assistance, both to avoid increasing the tax load and for fear of encouraging an invasion of the unemployed."

Such conditions, Ryan added, often result in "the passing on of the migrant from community to community, with his condition dropping to a level where he may become a spreader of disease and contagion, a social outcast whose children are left uneducated for lack of clothes to attend school, and a threat to any community in which he chances to reside."

DING DARLING WRITES OUR CHIEF LECTURER

Dear Mr. Wheeler:

Your evangelism is one of the hopes of this generation. With so many souls to be saved it is unfortunate that we can't cross you with a rabbit and have several hundred of you right away!

Some day when your schedule has an open week I wish they would date you up in Washington, D. C. to speak only to the government circles and make their attendance compulsory.

I am being constantly amazed at the gaps there are in the minds of some of our most influential government agencies and I find them defending the most outrageous practices, while wearing the badge of conservation.

More power to you and always with assurance of my high esteem –

J. N. DARLING

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

BEARD, W. P. Social viewpoint in conservation education. Social Education 3(9): 637-640. Dec. 1939.

BOMHARD, M. L. What palms grow in Louisiana. illus. Part VII. La. Conserv. Rev. 9(3): 30-34. Autumn 1939.

BRAY, M. W., MARTIN, J. S., and SCHWARTZ, S. L. Sulphate pulping of southern yellow pines. II. Effect of growth variables on yield and pulp quality. South. Pulp and Paper Jour. 2(6): 35-41. Nov. 1939.

COLEMAN, D. G. Wood in modern warfare. illus. Amer. Forests 46(1): 6-10, 32, 47-48. Jan. 1940.

COLLET, M. H. A calibrated beam for use in gaging small streams. diagr. Jour. Forestry 38(1): 66-68. Jan. 1940.

EDGERTON, D. P. Forestry and lumbering by Josephine Perry and Celeste Slauson. 128p. illus. Longmans, Green and co., New York and Toronto. 1939. (Book review). Jour. Forestry 38(1): 77. Jan. 1940.

ELDREDGE, I. F. More hardwoods than pine in lower South. Part II. Wooden Barrel 8(1): 8a. Sept. 1939.

______ The new forests of the old South. Diagr. South. Lumberman 159(2009): 99-104. Dec. 15, 1939.

GISBORNE, H. T. Forest pyrology. illus. Sci. Month. 49(1): 21-30. July 1939.

HICKS, W. T. Forest resources and industries as related to southern economic development. illus. South. Lumberman 159(2009): 174-178. Dec. 15, 1939.

KOEHLER, ARTHUR. The outlook for the chemical utilization of wood. illus. South. Lumberman 159(2009): 156-158. Dec. 15, 1939.

LOUGHBOROUGH, W. K. Chemical seasoning of overcup oak. diagrs. South. Lumberman 159(2009): 137-140. Dec. 15, 1939.

MAKI, T. E. Significance and applicability of seed maturity indices for Ponderosa pine. tables. "Literature cited": p. 60. Jour. Forestry 38(1): 55-60. Jan. 1940.

MEGINNIS, H. G. Effect of top pruning on survival and early growth of black locust. tables. "Literature cited": p. 36. Jour. Forestry 38(1): 30-36. Jan. 1940.

MINCKLER, L. S. Vegetative competition as related to plantation success in the southern Appalachian spruce type. tables. Jour. Forestry 38(1): 68-69. Jan. 1940.

NELSON, R. W. Economics of private forestry, by Ralph W. Marquis. 219p. McGraw-Hill book co., inc. New York. 1939. (Book review). Jour. Forestry 38(1): 70-71. Jan. 1940.

PAUL, B. H. Second-growth southern hardwood timber. Wood Products 45(1): 12-13. Jan. 1940.

PEARSON, G. A. A second cutting of ponderosa pine. illus. Timberman 41(3): 18-20. Jan. 1940.

PETERSON, L. E. Land use adjustment in the Spring Creek area, Campbell county, Wyoming, by R. L. Sparlock and S. M. Lingo. Soil conservation service publication. 15p. Washington, 1939. (Book review). Land Policy Rev. 2(6): 59-61. Nov./Dec. 1939.

PILLOW, M. Y. Characteristics of ash from southern bottomlands. illus., charts. South. Lumberman 159(2009): 131-136. Dec. 15, 1939.

RICHARDS, C. A., and CHIDESTER, M. S. Effect of Peniophora gigantea and Schizophyllum commune on strength of southern yellow pine sapwood. Amer. wood preservers' assoc. Proceedings. 36: 8 p. 1940.

ROESER, JACOB, Jr. The water requirement of Rocky mountain conifers. tables. Jour. Forestry 38(1): 24-26. Jan. 1940.

RUFF, F. J. Trapping penned bear. diagrs. Jour. Wildlife Mgt. 3(4): 288-294. Oct. 1939.

SAUNDERSON, M. H. Some economic aspects of the upland watershed lands of the western United States. Jour. Land & Public Util. Econ. 15(4): 480-482. Nov. 1939.

SCHOPMEYER, C. S. Survival in forest plantations in the Northern Rocky mountain region. tables, charts. Jour. Forestry 38(1): 16-24. Jan. 1940.

SCHREINER, E. J. Growing plants without soil, by R. D. Matlin. 137p. illus. Chemical publishing co., inc. New York. 1939. (Book review). Jour. Forestry 77-78. Jan. 1940.

SEARS, H. M. Saving protection dollars by scientific fire danger measurements. illus. South. Lumberman 159(2009): 180, 182. Dec. 15, 1939.

SHOW, S. B. Fire supplies from the skies. illus. Timberman 41(3): 11-12, 26-27. Jan. 1940.

SMITH, WYMAN. The largest community forest. illus. Amer. Forests 46(1): 22-25. Jan. 1940.

SPARHAWK, W. N. Forest trees of Missouri. Conservation commission, State of Missouri. 68p. illus. Jefferson City, Mo. 1939. (Book review). Jour. Forestry 38(1): 78. Jan. 1940.

______ Forestry abstracts, vol. 1, no. 1. Published by Imperial forestry bureau, Oxford, England. 1939. (Book review). Jour. Forestry 38(1): 74. Jan. 1940.

______ Woodlands of Kansas, by E. R. Ware and Lloyd F. Smith. Kansas agricultural experiment station. Bulletin 285. 42p. illus. 1939. (Book review). Jour. Forestry 38(1): 74-75. Jan. 1940.

STEER, H. B. "Plant 'er up". illus. Outdoor America 5(2): 6. Dec. 1939.

STOVER, W. S. Our southern forests. tables, map. South. Pulp and Paper Jour. 2(6): 19-23. Nov. 1939.

STRAUSS, C. W. Arkansas mill increases its stand of timber, also improves quality by adopting 10 year cutting cycle. illus. South. Lumber Jour. 44(1): 26, 62. Jan. 1940.

______ The need for better forest management in the South. illus. South. Lumberman 159 (2009): 165-168. Dec. 15, 1939.

SWEET, C. V. Plywood in relation to veneer package industry. illus. Wood Products 24(12): 19-22. Dec. 1939.

THELEN, ROLF. Chemical seasoning of wood results of recent research. Canada Lumberman 60(1): 19. Jan. 1, 1940.

TIEMANN, H. D. Lessons in wood technology. XVII. Paper and pulp from wood. (cont.) South. Lumberman 159(2009): 219-220. Dec. 15, 1939.

WAKELEY, P. C. Storing southern pine seed on a commercial scale. South. Lumberman 159(2009): 114. Dec. 15, 1939.

WARD, G. B., Jr. State control of cutting on private forests in Sweden. table. "Literature cited":. p. 51. Jour. Forestry 38(1): 48-51. Jan. 1940.

WOHLENBERG, E. T. F. Forestry depletion. West Coast Lumberman 66(12): 21, 62. Dec. 1939.

WHAT SORT OF COMPANY IS THIS?

"FRONTIER DOCTOR, by Urling C. Coe (Macmillan, $2.50). When the author went to Farewell Bend, Oregon, in 1905, he lived on what was almost the last frontier. He witnessed range wars and epidemics, and was continually in his saddle or buggy, equipped for all emergencies. He has a contempt for socialized medicine, forest service and other new-fangled measures." (From a recent book review)

THE EDITOR DISCOVER

The comfort and high speed of the modern railroad train and the mobility of the private automobile will be combined in a new train-auto travel service scheduled to begin May 1, when 2,000 current model 5-passenger sedans will be placed at the disposal of railroad passengers in more than 150 key cities throughout the West, according to a recent issue of "Travel and Recreation."

Complete arrangements for the service have been made between Railway Extension, Inc., whose headquarters are to be in Chicago, and 11 western railroad lines, it has been announced by Hugh W. Siddall, chairman of the Trans-Continental-Western Passenger Association, on behalf of the participating lines, representing a total of more than 100,000 miles. They are: Burlington Lines; Chicago and Eastern Illinois; Chicago, Milwaukee, St. Paul and Pacific; Chicago and North Western; Chicago, St. Paul, Minneapolis and Omaha; Great Northern; Illinois Central; Northern Pacific; Rock Island Lines; Santa Fe System Lines; and Union Pacific Railroad.

Under the new service a traveler may arrange for an automobile before leaving the point of departure, or after reaching the city where he wishes to engage it. Representatives of the extension organization will meet the passenger on arrival of his train, where final arrangements will be made.

The basis of rates of automobiles, including gasoline, oil, maintenance, as well as insurance protection, will range from eight cents per mile for a minimum of 10 miles per hour to a charge of 6½ cents a mile for a minimum of 1,000 miles per week. The rental will be the same whether one or five persons occupy the automobile. Where passengers do not have an identification card, a cash deposit will be required.

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The Senate on February 26 confirmed the appointment of James J. McEntee of New Jersey as Director of the Civilian Conservation Corps. Mr. McEntee has been Assistant Director of the Corps since its beginning in 1933.

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The time for "Uncle Sam's Forest Rangers" radio program has been changed to 12:45 p.m. EST (11:45 central time.) The program will continue to be given each Friday.

Stations KOH - Reno (500w - 1380kc) and WSAV - Savannah, Ga. (100w - 1310kc) have recently been added to the National Farm and Home Hour network.

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The February issue of "Survey Graphic" is the third in the magazine's "Calling America" series and is devoted to the subject of Homes as a "front line of defense for American life." Secretary Wallace is one of the contributors. His article is entitled "The War at Our Feet" and discusses the problem of soil erosion, its effect on the people, and what the Department is doing toward developing a program of wise land use.

Benton MacKaye of the Forest Service writes on the subject "Region Building in River Valleys - Upstream Community vs. Downstream Slum." Among the other contributors are David Cushman Coyle, on the subject "Back to the Land?"; Dorothy Canfield, on "I Visit a Housing Project"; Edith Elmer Wood, on "That 'One Third of the Nation'"; and Lewis Mumford, on "Social Purposes and New Plans."

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The "Ancient and Honorable Order of Squirrels" is now a national organization. Membership cards have been prepared and a supply sufficient to meet the requirements of all Regions will be printed at the Supply Depot at Government Island very shortly. There will be two types of cards, each 2½ × 4 inches, - one to be signed by the Towerman for persons who climb to the top of a fire tower, and the other to be signed by the lookout man for persons who climb to a lookout station. The wording, the same for both cards, is as follows:

(on the face of the card)

Drawing of fire
tower (or lookout
as the case may be)

THIS CERTIFIES THAT
on______________________19__

____

Climbed the ____________Lookout Tower (or station)
guarding the ___________National Forest
against fire, and is therefore recognized
as a member of the
ANCIENT AND HONORABLE ORDER OF SQUIRRELS
______________________(FS Seal)
Towerman (or Lookout Man)

(on the back of the card)

The hardest nut the U. S. Forest Service and the State Conservation Departments have to crack is the problem of man-caused forest fires.

As a member of the Squirrel Club I volunteer to help crack this nut by using the utmost
CARE WITH FIRE IN THE WOODS
As I work
As I walk
As I ride
As I camp

____
Signature

The "Squirrel Club" idea originated in Region 9, and use of the cards proved so popular among the citizens of that Region as to warrant some thought of making the club a national organization. The other Regions were circularized and on the basis of replies received I & E, W. O., prepared drawings which have since been sent to the Supply Office for printing.

The Forest Service is also cooperating with the American Legion Auxiliary in the development of a national Junior Squirrel Club. Details are not yet complete, but tentative plans would place eligibility for membership on either a trip through a National or State Forest, certified by a statement from the forest officer and a written summary of the trip presented to the Junior Chairman; or, by some other showing of accomplishment. Design for a membership card is being prepared by the Washington Office.

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A Seminar on Aerial Photography was held by the Department Group engaged in flood control in Washington, D. C., in December. While the discussions related primarily to the use of aerial photography in flood control surveys, some of the discussions relate to general use of such photos in other types of activities. The discussions of this seminar have now been mimeographed and a few copies are available from the Division of Forest Influences.

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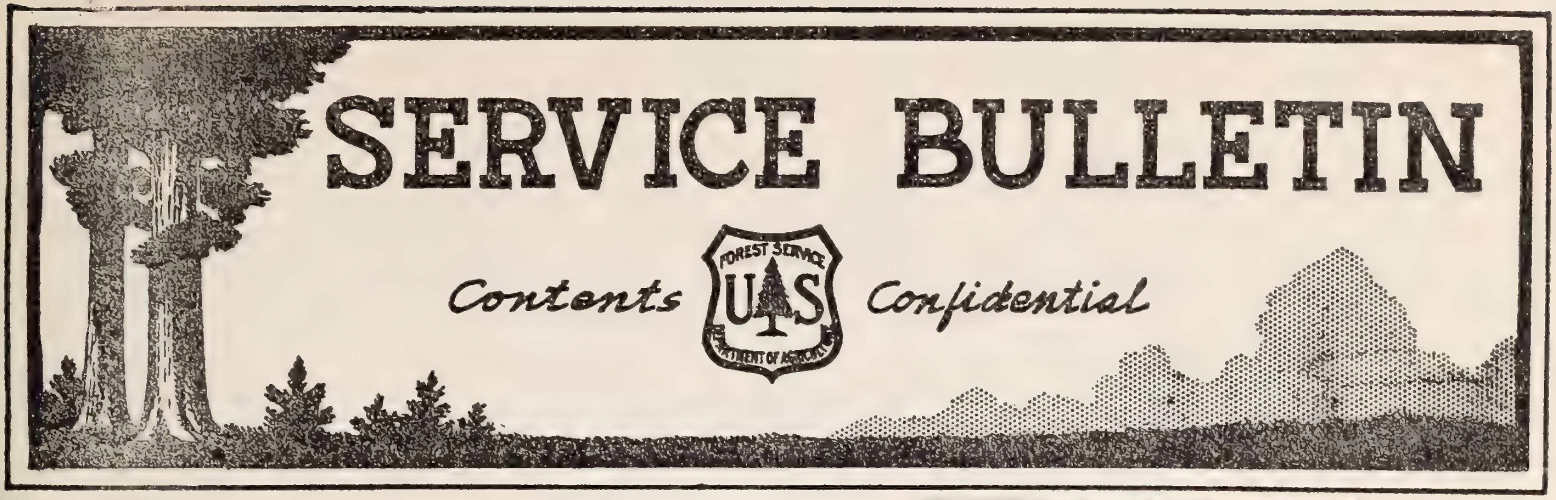

SERVICE BULLETIN

Contents Confidential

Vol. XXIV No. 7 Washington, D. C. April 1, 1940

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U. S. Department of Agriculture

A FAREWELL MESSAGE

By E. W. Tinker

I find it difficult to realize that I am severing my relationship with the Forest Service after 24-1/2 years, and more particularly the personal and official contacts with my friends in the organization. It has been a pretty long trail to depart from, and I leave it with the utmost regret. I travel again in my mind the road I have followed, leading from the Black Hills of South Dakota to the San Juan and Arapaho in Colorado, the Big Horn of Wyoming, the Regional Office in Denver, the relatively long period in Region 9, and the past 3-1/2 years in Washington. The things that stand out in my mind along that trail are concerned mostly with the human relationships which I hope will continue in the future. In leaving the Forest Service I do so with the utmost admiration for the organization as a whole and particularly the objectives of the organization in the public welfare. It is my sincere desire that in my new work as Executive Secretary of the American Paper and Pulp Association I can contribute as much or more towards the advancement of forestry and proper forest land use than I could as an Assistant Chief of the Forest Service.

In parting I want to pay my respects to an organization that can produce such men as worked with me in the organization of Region 9 and in meeting the tremendously difficult undertaking involved in the New England hurricane emergency. From these two undertakings I can draw no other conclusion than that no undertaking is too difficult for the personnel of the Forest Service with their background of training, loyalty and enthusiasm, providing they can be kept free from too much centralization. The Forest Service has weathered many storms and I have no fear that with the public confidence that has been inspired by past Forest Service accomplishments, it will carry on to the point where forestry and forest land use will have become an accepted part of our economic and social life.

I am deeply appreciative of the many kind communications I have received and hope that my associates in the Service will understand my regrets in leaving the organization. My sincere wish is to retain our friendly relationships in the future.

A FORESTER'S HEART

(Excerpts from an article by Rexford G. Tugwell, in the "New Republic" of March 4)

He was surprised. He had been out of the Service for 16 years. And here I was, an Assistant Secretary, begging him to become Chief Forester. He swore that he would never submit. But I was sure of my argument; and when he thought it over, the strangeness did appear superficial. The circumstances fitted him. He had been for what we called a New Deal back in the days when it was "Square" instead of "New": before that even, when the unromantic guarding of the public interest day in and day out had not yet been dramatized by T.R. and Pinchot. He had been a ranger when roads and even trails were scarce, before saws had been mechanized, when lookouts were few and remote, and when radios were unheard of.

From struggling alone with fire, with poachers, with overgrazers and wasteful cutters, his sense of guardianship had grown close to the bone. He had served through the scandals in Taft's administration, choking with righteousness, voluble with wrath, and had survived to negotiate honest agreements afterwards. Like so many old-time foresters his temper had been set by these experiences. No blandishments--not even the offer from Mr. Harold Ickes of the undersecretaryship--would ever persuade him that the Department of the Interior was not a haven for all the devils of land speculation and timber wastage....

He had got to be a Regional Forester at Missoula by the first summer of the Great War. It was more necessary then than now to depend on local labor for fighting the dangerous fires of autumn. The Civilian Conservation Corps had not yet been thought of. And what with the draft and a booming agriculture the supply of men was all used up. It was unusually dry that season and the fire losses threatened to be extreme. To understand the awfulness of Silcox's resort in this crisis it has to be remembered what a Red scare there was abroad in those days. It was the high point for the IWW, the "Wobblies," the "I won't works." Their syndicalist philosophy and their direct methods appealed especially to brutalized casual workers who manned the lumber camps and followed the harvests north from California as the season advanced. In late summer there were numbers of them congregated in Missoula carrying on a kind of guerilla warfare with farmers, timber owners and factory managers. The propaganda against them was terrific. They had grown wary and sullen and were beginning to look at the idea of revolution as something not so strange, now that it had been flung at them persistently for weeks. Certainly they were more than ever determined to sell their labor dear, regardless of the "boys over there" who were said to be suffering because of their withholding.

One morning Silcox, made desperate by reports from tired rangers of new fires everywhere, went round to Wobbly headquarters and, after some maneuvering, got first a half-dozen, then twenty, then a whole hallful to listen as he talked. What he had to say was that he understood their philosophy to include the public ownership of all national resources. There was one--the forests--which the government had already got a share of. And day by day it was going up in smoke. He pointed out that when the workers took over the government its assets might as well be delivered in good order. That was his job; but he seemed to be failing at it. He had appealed to everyone else he could think of. Factory owners were making too much money; farmers were hustling in their crops; the workers he had usually depended on were, those of them still left, getting wages higher than he could pay. Did the IWW have enough faith in their own future to come out and save forests which, if they were right, would some day belong to them? They would and did. There never was such fire fighting! And after it was over Silcox could not resist bragging a little and twitting the scared upper classes of Montana....

After I telephoned to him that day in 1933 he was for nearly seven years Chief of the Service in which he had been bred--its best, as foresters anywhere will report, after Pinchot.

His achievements were greater, perhaps, in security, morale, uplift everywhere, than in actual change. He had a program for reorganization which one thing after another seemed to postpone. It still remains for his successor to carry through. But he fought valiantly for sustained yield on private as well as public holdings; he added enormously to Eastern and Southern forest areas; he utilized the opportunity furnished by the CCC to build thousands of miles of trail and phone line, to set up hundreds of recreation camps, to plant, to thin, and to harvest millions on millions of trees; and he filled a generation of young foresters--not all pack-horse rangers as he had been, but many of them scientists, management experts, even statisticians--with a wholly new spirit, one which contained the old loyalties but which went far beyond them....

It was very probably an old trail-strain on his heart which caused its final failure. He had been on notice for some time. We spent a strenuous day together in May going over the hurricane clean-up work in New England. I asked him then about that heart. He called my attention to lilac and syringa which seemed to hide the devastation a little. I insisted. He mumbled something. Then I said sharply that he was clearly doing too much. "They say it'll quit someday," he admitted, and then in a high, humorous, bragging voice, "but by God it'll be a forester's heart as long as it lasts." He laughed. But I didn't. The sentiment he tried to hide in burlesque I knew was genuine; at any rate he did not let up and it did quit in December. I have since thought of what he said as something any young forester might quite seriously paste in his new green hat.

TIMBER SALVAGE FROM THE MCVEY BURN

By R.R.Hill, Black Hills

In the 22,000 acre McVey fire of July 10-13, 1939, approximately 30 million board feet of timber of merchantable size were killed. Heaviest losses were on the Rapid Creek Working Circle, of the Black Hills National Forest. The Spring Creek and Hill City Working Circles, involving both Black Hills and Harney Forests, suffered smaller losses.

From previous experience it was known that deterioration would start almost at once and plans were immediately made for salvaging the fire-killed timber. On July 24, the first notice for 4,350 M ft. b.m. was published, and on July 27, 9,840 M ft. b.m. aditional were advertised. In addition, 9 million board feet had been under contract at the time of the fire. While prices for green timber ranged from $3 to $4, the minimum for bids on the burn was set at $1. Bids received ranged from $1 to $2.50, but the average price received will be very little over $1 per M ft. b.m.

Where contracts were existent, salvage was started before the mop-up crews had finished - on one sale, cutters felled a tree that when opened was found to be still burning in the center. Nine of the ten independent operations in burned timber consist of portable mills and their output is sold largely in the form of railroad ties. The Warren-Lamb Lumber Company immediately concentrated its logging in the burn with five subcontractors. In addition to sales, administrative use permits for construction materials and fuel wood have been issued to the NYA, CCC, WPA, and U. S. Indian Service.

It is expected that about 50 percent of the merchantable timber will be salvaged. There are several reasons for the loss of the remainder. First, the timber on some units was too widely scattered to justify logging. Second, merchantability requirements were necessarily made less restrictive to the tie operators which resulted in small trees and tops being left in the woods. Third, wood borer work rapidly riddled the smaller logs, particularly those from younger trees, with a large proportion of sapwood.

The duration of salvage operations is dependent primarily upon the extent of damage by borers and blue stain. Most of the cutting will be completed before summer, and after that little sawtimber can be saved except from larger trees.

On the three working circles involved, accessibility and demand are such that cutting has been up to the calculated allowable limit. The Warren-Lamb Lumber Company, of Rapid City, with 350 employees, is dependent upon timber from the eastern portion of the Black Hills. In addition, there are numerous smaller operations equally dependent. The loss of growing stock on 22,000 acres is therefore serious.-(From Rocky Mountain Region Bulletin)

FORESTRY IN THE UNIFIED COUNTY PLANNING PROGRAMS

By Lyall E. Peterson, Washington

One of the several subcommittees of the Interbureau Coordinating Committee is actively engaged in analyzing the various unified county programs as they are submitted to Washington.

Procedure:

According to existing procedure the BAE Division of State and Local Planning receives these reports and sends them to all designated representatives of action agencies for preliminary review. At the ICC meeting (Mr. F. F. Elliot of BAE is chairman), each representative is invited to comment on the report; these comments to serve as a basis for a covering memorandum which will be transmitted to the field as the Department's reaction. Major policy questions and recommendations for action not immediately possible will be submitted either to the Agriculture Program Board or another appropriate Interbureau Committee. It is the hope of the BAE that each action agency will follow up on this by transmitting copies of appropriate correspondence and memoranda of specific suggestions to its State representatives. The Forest Land Planning Division is handling this function for the Forest Service.

Progress:

During the past few months the ICC has considered and passed on unified reports from nine of the 46 counties selected for the 1940 program. All of these represent major forestry problems ranging from only farm forestry in most instances to a much more complicated condition in other cases. The work of four other counties also has been reviewed and commented on by this office, although their final reports have not yet been considered by the ICC. The summary on the following page indicates, roughly, Forest Service interests in each of the thirteen counties.

Future Consideration:

During the next few months many of the remaining 37 unified program counties will submit reports for consideration as described above. Most of those remaining are of interest to the Forest Service because they have major forestry problems which we are well qualified either to advise or help remedy.

Reports on the so-called intensive planning phase have been received by the BAE from 60 of the 566 counties so designated in this year's program. The factual data and land classification maps in these reports are valuable as reference material. The Forest Influences Division is now making use of this information and I trust that other Divisions will be pleased to learn that such reports ultimately may be available for most counties in the United States.

SUMMARY ON 1940 UNIFIED COUNTY PROGRAMS

				Forest Service Participation		
State	County	% Forest	National Forest County	County level	State level	Treatment Given Forestry
Ala.	Lee	48	No	No	No	*Inadequate. Apparent need for technical advice.
Calif.	Yuba	45	Yes	Yes	Yes	Inadequate. Forest Service cooperating in further study
Md.	Allegany	60	No	No	No	*Fair. - State District Forester aided county commissioner in preparing forestry program.
Minn.	Carlton	77	No	No	Yes	Complete report not yet submitted. Forestry is major problem here.
Mont.	Teton	12	Yes	Yes	Yes	Good. Regional forester sends letter to local committee outlining agreement. See LP
Nebr.	Boone	4	No	Yes	Yes	Good. Prairie States project submits specific agreement on future work.
N. Y.	Wyoming	25	No	No	No	*Inadequate. Apparent need for technical advice.
N. C.	Caswell	58	No	No	Yes	*Inadequate. Apparent need for technical advice.
Ohio	Ross	33	No	Yes	Yes	*Good. Training school in forestry practices planned for March 1940. See LP-153
Oreg.	Coos	88	Yes	Yes	Yes	*Good. Forest Service leading a more detailed study of entire forestry problem.
Vt.	Chittenden	45	No	No	Yes	*Fair. Forest Service following up on local community forests.
Va.	Culpeper	39	No	No	Yes	*Inadequate. Apparent need for more technical advice.
W. Va.	Lewis	24	No	No	Yes	*Inadequate. Apparent need for more technical advice.

*Passed by Inter-bureau Coordinating Committee.

CO-OPERATIVE FOREST FIRE FIGHTING CREW ORGANIZED IN CITY FIRE DEPARTMENT

By Foster Steele, Mount Hood

During the month of February, in cooperation with the Portland City Fire Department, we conducted a training course in forest fire fighting at the Portland Fire College. The course was given at the invitation of Chief Boatright who is interested in improving the Department's technique and ability to deal with grass, brush, and timber fires which occur within many of Portland's City Parks and on the hillsides within the city limits.

A study course was prepared and issued in mimeographed form to each trainee. This course was based on the R-6 Fire Control Handbook and the Western Fire Fighter's Manual. It covered approved practices of fighting fires, including the progressive fire line construction method, and fire crew organization. A list of good and bad practices based on the handbook list was also included. The test for this part of the course consisted of a set of "True or false" questions prepared by the Fire Department, which the trainees were obliged to mark and submit to the Department.

The visual education and lecture part of the course was conducted by Principal Forest Ranger Albert Wiesendanger of the Mount Hood National Forest. He gave twelve lectures illustrated with colored lantern slides and a motion picture of the "one lick method" to a total of 462 trainees. In addition to the lectures he prepared and installed at the fire college a complete display of forest fire fighting equipment, including weather station, fire tools, pumps, radio, telephones, fire danger recording instruments, Osborne fire finder, platting board, etc., supplemented with panels, dioramas showing causes and effects of fires.

These lectures and demonstrations showing the use of the equipment were attended not only by the city firemen but also by county and city commissioners, state policemen, officers of the American Legion, county road foremen and employees of the Bull Run Watershed, from which Portland receives its water supply and which is located on the Mount Hood National Forest, and others who evidenced a great deal of interest in the project.

"Step Four" is coming up in April when the rains stop and actual fire line building can be done in the dry. At that time we hope to take fifty firemen, who top the list as a result of an examination based on the study course, out to Bull Run Watershed. Here we will organize the crew into a progressive fire line construction gang and actually demonstrate how it is done.

A map showing the most direct route from the city limits of Portland to the Bull Run Watershed has also been prepared and a copy given to each fireman.

Pump chances, along the route of travel from the city limits of Portland to the headworks of the Bull Run Watershed, where city fire pumpers could be used in an emergency have also been located and signs posted.

Chief Edward Boatright, who has charge of the Fire College, says, "We're thoroughly conversant with fighting fires by water but we have to think about grass, brush, and forest fires in the hills back of the City. We do not want to have the experience Berkeley, California, had a few years ago when a brush fire spread from the hills back of Berkeley and entered the city, destroying a section of the residential district. Besides, we have to protect the Bull Run Watershed from which we get our water supply for fire fighting in Portland."

In addition to giving Portland a more efficient fire department this course has promoted fine cooperation between the various protective organizations and stimulated fire consciousness in a big way.

MISS BELL "SELLS" A FOREST SERVICE STORY

By Alan Macdonald, Washington

The other day, Miss Bell, of Fire Control, enjoyed a moment of happy satisfaction. She did not tell me; her eyes did.

One late afternoon, several weeks ago, Miss Bell was going home on a bus. A lively young girl sat down beside her. She was a talkative girl and among other things she soon told her chance seatmate that she worked in the advertising department of "The American Rifleman," official Journal of the National Rifle Association of America.

"Ah," said Miss Bell, "are they doing anything about fire prevention?"

The girl didn't know, but as Miss Bell told her the Forest Service story she said she thought "they" might do something about it. Anyway, she hopefully opined, she knew Mr. Hathaway, the editor, was always on the lookout for ideas, and he "might be sold on fire prevention."

The prospect teased Miss Bell. Finally, she related to Mr. Headley what the girl had said. The Chief said, "Hum, that's interesting. R. V. Reynolds is a member of the Rifle Association." He got in touch with Mr. Reynolds. Mr. Reynolds talked with Editor L. J. Hathaway. The editor, like most editors, a man interested in everything and anything - for the simple reason that you never can tell where a good story may be hiding - was sold on the idea of printing a fire prevention story.

Mr. Headley sent "Dave" Godwin and myself to talk with Mr. Hathaway about the kind of story he would like, length, photos and other details. In due time, the story was prepared. It appeared in the March issue, five or six pages, 3,000 words and five telling Forest Service photos of it. It was a fine thing to see Miss Bell's eyes as she looked at the printed pages of that Fire Prevention story, which never would have been possible had it not been for her alert and interested public relations work.

Many members of the Forest Service, like Mr. Reynolds, belong to associations, societies, and other organizations which publish magazines and house organs, as some of their publications may well be called. This type of publication, I think, is in this day of big news events and jammed newspaper columns one of the most easily accessible and readily effective media of publicity available to the Forest Service. In many instances, the editor may be waiting to be sold on a first-rate article on some Forest Service subject. In case you know - or meet someone who knows-such an editor, why not make a few inquiries, and in case of a "strike" call in "I. & E?" Because humans are so different from one another, and their individual likes and dislikes are so varied and unaccountable, so far as interesting the individual is concerned, any printed page - no matter how small or unpretentious - may be as effective as a flood-lighted billboard.

DANVILLE COMMUNITY FOREST RECORDS

Story II – For Twenty Years They Petitioned

By Ernest O. Buhler, Washington

Until 1760 the settlers at Danville, New Hampshire, had no church. They attended worship at Kingston, but in bad weather it was difficult to get there. For twenty years they tried to get permission to have a local government of their own, but with no success. As a last resort they took matters in their own hands by starting to build, at their own expense, their own church regardless of the Governor's pleasures.

It was built by 28 citizens. They cut the logs in the nearby woods and hauled the heavy timbers by oxen. When the meeting house was built, it was deeded free of charge to the parish. It had no stove to keep it warm. If the days were cold, some of the people would come to the meeting house equipped with foot-warmers. These consisted of a small iron box which was filled with charcoal.

The church was thus without any stove until 1830. In that year the parishioners voted to sell $200 worth of wood and timber from the community forest which they had, and still own, and to expend part of this money in purchasing a stove for the meeting house. As a consequence, a chimney was built, a stove was purchased and from that time on, the church was warm. But, for a period of 70 years, from 1760 to 1830, the church goers worshipped when the days were cold, in a cold church. However, their religious part of life was real and a living thing and hence, it can be assumed that their faith helped to keep them warm.

On Sundays church would usually start at 10 a.m. and with few interruptions, Sunday school, prayers, sermons, and the singing of hymns would last all day. There was intermission for dinner, which most parishioners brought with them.

The same year the stove was bought, a small wooden trunk was also purchased for $1.03 to "Keep this book in and other accounts". This trunk is about 24 inches long, 20 inches wide, and 20 inches high. It is still in possession of the Parsonage Committee and most of the records quoted were found in this little trunk purchased 110 years ago.

But, even though they built their own church, they were not sure that they would be successful in having a local government of their own. Hence, we find again a petition dated February 22, 1760. It was signed by 58 men.

".... That whereas Providence hath placed us at a great Distance from any place of stated public worship in Town & so render our attendance thereon very difficult: We have built a meeting House among us That we might more conveniently attend the public worship of God & with more ease & comfort enjoy the Word & ordinances necessary for Salvation: Wherefore We humbly pray that we may be sett off & incorporated into a Parish.--" This petition was finally granted and the assembly wrote a 504 word bill of instructions without any commas or periods, all in one sentence. The bill was read three times in the assembly and then passed to be enacted.

The support of the ministry of the gospel was item number one in this bill of instructions to the new parish. Support of the poor came next, then schools and highways. Hence, each year when the town meeting was held, we find in the records a provision for schooling but the pursuit of knowledge then was attended by many difficulties. The people incurred such great expense in clearing their land, erecting their houses, building roads and bridges, and supporting the military companies that they had but little money left to build school houses or pay the school master. Even when by hard labor they earned a little money, it was not safe to keep it long. Frequently in a few months their money would lose much of its value. Moreover, their paper money was of such poor quality that it often deteriorated in the hands of the town treasurer before he could pay it out for the proper objects and the town would have to pay him for his losses.

Although they stinted on schooling, they were relatively speaking generous with their time and money on "priching". This is evident from the very beginning of their Danville government in 1760. It is seen in such first thing actions as building their church, building the minister's house, and assembling the community lands which are to furnish him with fuel, a garden and a pasture. Thus, it has come to pass that since the Danville Community Forest was to help in the support of the ministry of the parish, its establishment was primarily due to the inhabitants' ardent desire to find salvation for their souls.

FOREST SERVICE TRAINING

Dear Mr. ______________:

I have just read the excerpts from Pete Keplinger's memorandum reporting on the training developments in the February 5 issue of the Service Bulletin. It is an unusually interesting statement both from the standpoint of training technique trends as found in the Forest Service and as an indication of the progress being made in the Forest Service. The Forest Service has made a great deal of fine progress in training--in fact I think the most important portions of the foundation have been laid there as manifested by the fact that a great many terms have come to have a more widely accepted common definition there than in practically any other agency in the Department.

Sincerely yours,

Roy F. Hendrickson, (Signed)
Director of Personnel.

INSTALLATION OF AIR CONDITIONING UNITS AND SYSTEMS

The Division of Plant and Operations has advised that considerable difficulty is being experienced by the Public Works Agency in securing funds with which to pay for electric current and maintenance service for small air conditioning units or systems provided by agencies occupying government buildings. Oftentimes such units or systems are installed without their knowledge and they have no opportunity to request funds from the Bureau of the Budget and Congress with which to defray the above mentioned expenses, which by law must be borne by that office.

Funds recently requested to cover the costs of operating these units expected to be purchased by the various occupying agencies during the coming season were not allowed by the Bureau of the Budget. Accordingly, it will be necessary to decline to connect any additional air conditioning apparatus purchased by the occupants of any of the buildings or to permit such apparatus to be connected to the electrical system in any building until that office has been advised of the contemplated purchase of such units or apparatus, and has been able to secure funds to cover the cost of connecting and operating the equipment.

THE EDITOR DISCOVERS

Knowing of the interest of the President and Mrs. Roosevelt in the Prairie States Forestry Project, the Forest Service sent a copy of the recently released film "Trees to Tame the Wind" to the White House. In her column "My Day" for March 11 Mrs. Roosevelt comments on the film as follows:

"Friday evening we saw two rather interesting short films. One of them on the shelterbelt planning is so good that I hope it may be shown as a short in many commercial theaters. Thru it, people everywhere who are not familiar with this particular bit of conservation work will better understand what it has meant to human beings like themselves on farms in the windswept prairie region of the United States."

Mrs. Roosevelt's comment is being used in calling the attention of commercial theaters to the film, in the hope that it will receive a very wide showing.

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Plans are under way for the organization of a society whose purpose will be "to support, increase and, to a greater degree, unify, all efforts for the conservation of soil, rain, and all living products, especially Man." It is the intention of this proposed non-profit organization to work with friends of conservation, both lay and professional, here in this country, and later with like-minded men and women in other lands.

The organizing committee, consisting of the following members, has prepared a very attractive circular, containing a brief anthology and statement of the need and purpose of such an organization, which has been distributed to a selected list of conservation minded citizens:

Morris Llewellyn Cooke, Organizing Chairman; directed the Giant Power Survey of Pennsylvania for Governor Pinchot in 1923; earlier in the present administration, from 1933 until his retirement to resume private employment in 1937, he served as Administrator of the Rural Electrification Administration, as Chairman of the Mississippi Valley Committee, and as Chairman of the Great Plains Committee Report; he also organized the Upstream Engineering Conference.

Bryce C. Browning, executive secretary of the Muskingum Conservancy District in Ohio.

Charles E. Holzer, prominent doctor in southern Ohio; organized the Ohio Valley Flood Control and Conservation Congress.

Russell Lord, one of the leading writers in the field of conservation.

Charles W. Collier, Organizing Secretary.

The circular is entitled "Friends of the Land", which may be the name of the new organization. Other suggested names are "Society of the Land" and "The Conservation Society."

Publication by the society of a magazine "The Land" is proposed and it is hoped by the Committee that this will be under way by July.

At an organization meeting to be held in Washington, D. C., on March 22-23, the name of the society, Constitution and By-laws, and other organization matters will be decided upon and directors will be elected.

It is the hope of the committee that a great many Forest Service people will become members of the new society. As soon as a report of the organization meeting is received, it will be published in the Service Bulletin.

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A new method of protecting field planted tree seeds from the ravages of mice has been tried out in Region 1 by the Northern Rocky Mountain Forest and Range Experiment Station, according to a recent press release issued by that Region. In the new method, a poisonous coating, developed by the Control Methods Laboratory of the Biological Survey at Denver, Colorado, is applied to the seeds before they are sown. About 20 seeds are sown in a spot, and spots are spaced eight feet apart over the area. Seeds are covered with about 1/4-inch of soil.

After two years of experimental seeding with western white pine on burned-over areas in the Coeur d'Alene and Kaniksu Forests, Region 1 believes that the method is sufficiently satisfactory to be put into practice on the better sites within the western white pine type. Further tests, if successful, may result in extension of the method to other regions where coniferous trees are grown.

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The Eighth American Scientific Congress will be held in Washington, D. C., May 10-18, 1940. Its object is to advance scientific thought and achievement, and to assist in celebrating the fiftieth anniversary of the founding of the Pan American Union.

One of the sections of the meeting will deal with agriculture and conservation, of which Dr. Bennett, Chief of the Soil Conservation Service, is Chairman. It is the intention of the Committee on Agriculture and Conservation to devote certain meetings of the section to the delivery of prepared papers, and other periods to informal discussions or seminars, covering such subjects as scientific principles governing the use of land for agriculture, including also the conservation of grass lands, forests, wildlife areas, and recreational lands. Discussions are planned to cover public land policies, and scientific principles upon which these policies are based. Special attention will be given to the science of ecology, as it affects programs of land conservation.

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According to the R-2 Annual Planting Report for C. Y. 1939 a limited quantity of Austrian and ponderosa pine cones were collected from the Bessey (Nebraska N.F.) plantations and the seed extracted for nursery use. One hundred eight bushels of jack pine cones were also collected, yielding 51 pounds of seed.

These plantations, among the oldest on any National Forest, are thus producing valuable seed for continuing the planting program in the Nebraska sandhills.

This is local seed, one generation removed from perhaps far-distant sources. It is interesting to speculate on whether or not trees grown from this seed will be better suited to rigorous sandhill conditions than stock grown from seed of other sources. The seed came from those survivors of the original plantations which have been able to live under local climatic and soil conditions. Perhaps their progeny will be even better fitted for the struggle.

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George H. Collingwood, for many years Forester of the American Forestry Association, was recently appointed Chief Forester of the National Lumber Manufacturers Association. He succeeds John B. Woods of Portland, Oregon, now Executive Officer of the Oregon Forest Fire Association. Mr. Collingwood will assume his new duties about April 15. Mr. Collingwood received his early forestry training at Michigan State College, where he was graduated in 1911 with degree of Bachelor of Science. Following his college course he entered the Forest Service and served for two years as assistant ranger in the Apache National Forest in Arizona. From 1923 to 1928, when he joined the American Forestry Association, Mr. Collingwood was Extension Forester for the Department of Agriculture, serving as liaison officer between the Forest Service and the Extension Service.

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According to an item in a recent issue of the R-2 staff meeting report, Messrs. J. E. King and Vernon R. Powell, of the R-2 Division of Engineering, have been granted a patent covering a drafting instrument known as a mosaic spider. The instrument is used in transferring selected reference points from control sheets to photographs used to make up a mosaic map, and makes the construction of the map more rapid and accurate.

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The following employees retired from the Service during March:

Thomas Crossley, Kaniksu, R-1
L. W. Hess, Coronado, R-3 (disability)

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H. Frank Evans, former ranger naturalist in the National Park Service, will conduct six 12-day and three 24-day wilderness trail vacation trips into the Selway and Bitterroot National Forests next summer. Each group will hike approximately 100 miles in twelve days of moderate hiking, which will be accomplished in the mornings; afternoons will be free for rest and various recreations. The charge for the 12-day trip will be $75, and for the 24-day, $150. The 12-day trips start at Hamilton, Montana, June 17 and 28, July 11 and 22, and August 4 and 15. Twenty-four day trips start June 17, July 11, and August 4. Persons interested in making reservations for any of these trips may be referred to Mr. Evans, 301 W. Cherry Street, Carbondale, Illinois.

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The Fechheimer Brothers Company writes: "Looks as tho the Forest Service Uniform Committee set the pace and were 'way out in front' in selecting a coat with the side pleats in the back (by-swing). The United States Army just recently added this feature to their regulation coat."

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The first issue of "Wood Technic," a successor to the "Hardwood Record," is off the press. According to the editors, "Wood has won back a large part of its lost markets and is destined to go forward in long strides - courageously and consistently. To that progress in the new scheme of things in wood this magazine, Wood Technic, is dedicated."

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On and after March 25, the radio program "U. S. Department of Agriculture" (produced in San Francisco and broadcast over the Pacific Coast Blue Network) will be heard from 11:45 to 12 o'clock noon P.S.T.

EDWARD A. SHERMAN

(The unfinished page)

A new copy of the standard Forest Service Diary, form 289, lay on the desk that had been E. A. Sherman's. Its one entry, in his own writing, gives much of the history of his earlier career in the Forest Service. It was as follows:

> "Washington, D. C.
> March 26, 1940.
>
> "Beginning with my appointment as Supervisor of the Bitter Root (Mont.) Forest Reserve by the Commissioner of the General Land Office of the Department of the Interior December 26, 1903, I adopted the practice of keeping a diary or record of my official activities. At first this was a daily record, brief and rather perfunctory. After our transfer to the Department of Agriculture and organization as the Forest Service, February 1, 1905, the diary was limited to recording field activities but became much more detailed and explicit. These diaries I always considered a part of the official record of the office I filled at the time.
>
> "When I was promoted to Chief Inspector of Inspection District No. 1, now Region 1, and my appointment as a Forest Supervisor terminated, my diaries up to that time were turned over to my successors as part of the official records of the Forests. I say 'successors' because I was at one time or another Supervisor of the Bitter Root (Mont.) National Forest, the Hell Gate National Forest; the Lolo National Forest; the Missoula National Forest and the Big Hole (North) National Forest. When I left the office and Forest I left my diaries behind me. I have taken it for granted that these were all destroyed many long years ago.
>
> "Similarly, my diaries as Chief Inspector of Region 1, from about April 1, 1906, to November 1, 1908, were left in the Missoula office when I went to California to take charge of the Sequoia National Forest, to succeed W. B. Greeley who was sent to Missoula to establish the 'District' administrative office. My Sequoia diaries were in turn left behind at Hot Springs, Tulare Co., Calif., when I was sent from there March 1, 1910, to succeed Clyde Leavitt as District Forester at Ogden, Utah. And finally, my District Four diaries were left in Ogden, Utah, when in the early spring of 1914 the then Forester, Graves, called me to Washington to assist in starting the classification of the National Forests under the Forest Homestead law---a detail that proved permanent, rather than temporary."

Here the record ends. Perhaps E. A. intended to continue it with brief mention of his six years of service as Assistant Forester in charge of Lands; of his more than fifteen years of service as Associate Forester; of his almost five years of service as Assistant and Advisor to the Chief. But Providence decreed that on the second morning following his quiet sleep should continue unbroken throughout all time.

Born on an Iowa farm, he helped break virgin prairie sod and knew what it meant to fight the handles of a plow through long, hot hours. In hope of better things he managed somehow to get a college education. At the outbreak of the Spanish-American War he enlisted in the

Army. Selecting journalism as a career, and Montana as his future home, he found himself intrigued by the dawning concept of a systematic national policy and program of forest conservation and enlisted his fine talents in that cause, of which he ever after was a militant advocate, but combining with his militancy a fine and subtle strategy, a patient diplomacy, a sympathetic understanding, that made him a leader almost from the beginning. When eight field men were brought into Washington in 1905 to revise the Use Book, Sherman was made chairman of the group. Thereafter it was his lot to receive the difficult and important assignments which demanded wide and dependable factual knowledge, broad backgrounds of understanding, exceptional powers of analysis and evaluation, superlative forms of presentation.

He was without arrogance or egotism; unselfish and kindly; unswerving in his fidelity to the public interest; passionate in his loyalty to the Service. Only of injustice and dishonesty was he intolerant and critical. In him every man and woman in the Forest Service could find a friend, generous in his sympathy, counsel and assistance, and many did. Thus it was that he commanded not alone the honor and respect but also the genuine affection of those who knew him. He was like a great tree towering in the forest, a guide and landmark, fecund of ideas, a refuge in times of stress, a source of inspiration. Physically he is gone, but the imprint of his personality and ideals upon the fabric of the Forest Service will endure.

L. F. KNEIPP

DR. RABER

The death on February 29 of Dr. Oran Raber, Conservationist at the Southern Station comes as a distinct shock to the members of the Forest Service and especially to those who knew and worked with him. The end came suddenly, as the result of a cerebral hemorrhage, while he was seated at his desk making a telephone call.

Dr. Raber was educated at Indiana and later at Harvard, where he received his Ph.D. in 1920. After completing his formal education he spent some years teaching and travelling. He came to the Forest Service in 1935 and after a year as head of the Translation Unit in Washington, went to the Southern Station as Editor.

In the fields of plant physiology and botany Dr. Raber was an outstanding scientist and writer. His particular interests in these fields were permeability, water relations of trees, and the shipmast locust. He was also enthusiastically interested in art, music, poetry, and education.

Perhaps Dr. Raber was best known for his textbook on Plant Physiology published in 1929 and revised in 1933, which has been used widely in colleges and universities throughout the country. Shortly before his death Dr. Raber's "German-English Dictionary for Foresters" was published. This dictionary, by a man familiar with the literature in both languages and with a scientific background, will be an invaluable aid to foresters. Two other outstanding contributions of Dr. Raber's were "Water utilization by trees with special reference to the economic forest species of the North Temperate Zone", and "Shipmast Locust, a valuable undescribed variety of Robinia pseudoacacia." His editorial work on A. D. Hopkins' "Bioclimatics" made this report available to the scientific world. He was also an editor for Biological Abstracts.

Among those who worked with him, Dr. Raber will always be remembered as an exacting scientist and an industrious worker. His cooperative spirit, friendliness, and ready wit and humor made it a pleasure to be associated with him and surrounded him with a host of friends.

WILLIAM W. MITCHELL

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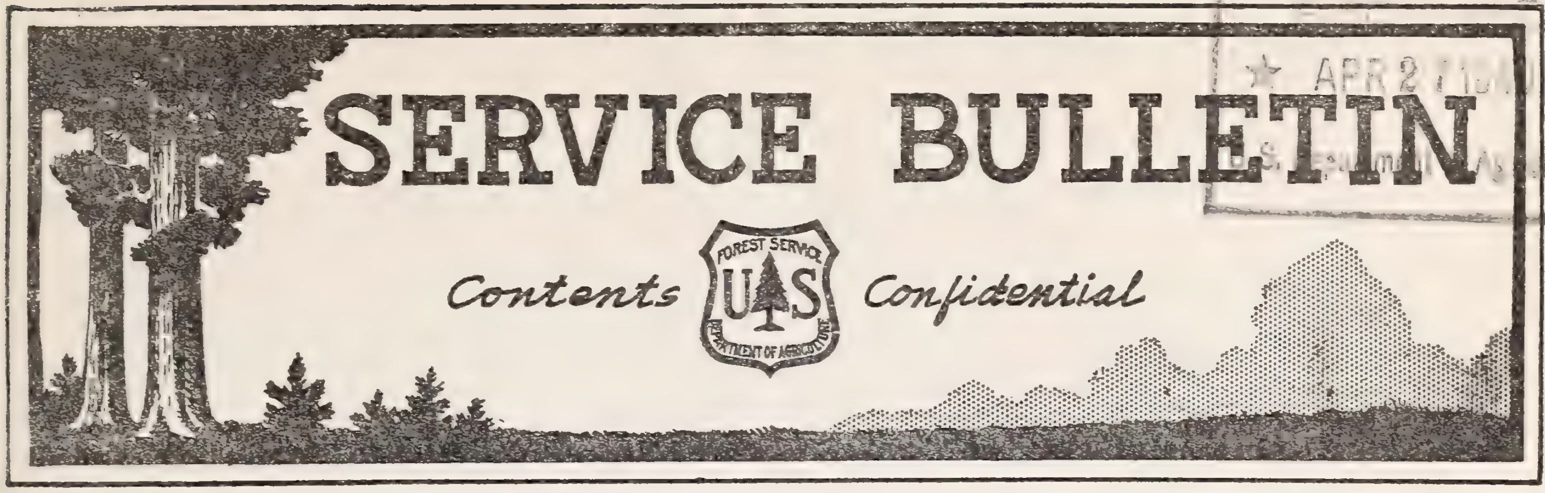
U.S. Department of Agriculture

SERVICE BULLETIN



Vol. XXIV No. 8 Washington, D. C. April 15, 1940

A TRIBUTE TO E. A. SHERMAN

We have lost one more of the stalwart members of the older group in the Forest Service. It is impossible fully to measure his great service to forestry and especially to the development of policy in building the system of National Forests. From personal experience and deep study he had mastered the history of the Public Domain. He was one of the most influential figures in guiding the transition from the old to the new system of handling public resources. His courage, wisdom, and devotion to public interests made him an effective leader within and without the Forest Service. During my own service with the Government I turned to him constantly for advice and help in difficult situations. He was one of my most valued counsellors, and I know that my successors had the same deep appreciation of his great contribution to the advance of the movement of forestry. We loved him for his personal qualities of generosity and consideration, his delightful humor, and charm of companionship. We admired his keen perception, scholarly attainments, and sound judgment. His passing brings genuine sorrow to all who knew him.

HENRY S. GRAVES

ROVING RANGERS - OR TRANSIENT FORESTERS

By S. A. Nash-Boulden and W. S. Brown, Los Padres

(The Editor at first hesitated to publish the following article because he felt the authors had not given an adequate explanation of the many reasons why transfers are made. But, following the Washington Office way of considering problems, the article was routed around to a few experienced and thoughtful Forest Officers - including a detailer or two - for comments. After reading the comments, the Editor decided to print the article, quoting some of the comments. Since it is believed that the pros and cons of transfers would be an interesting and worthwhile subject for discussion in the Bulletin, we hope additional contributions will be forthcoming.)

HOME! The sweetest word in the English language -- the commonest and most expressive word in any tongue! Where is the man, even though he be the vaguest derelict in the driftwood of humanity, who does not utter the word in a tone of reverence and respect? HOME! The theme of the sailor's chant in the still watches of the night on the rough waters; the burden of the soldier's thoughts amid the carnage of the battlefield; the subject of the mother's lullaby. HOME! The children of Israel wandering long decades in the wilderness in search of a permanent abiding place; the clinging of the New England farmer to his shallow-soiled, rocky hillsides; the stubborn persistence of the French peasant braving iron death from the skies to keep the soil of ancestral acres beneath his feet; or the American pioneer hewing out his domicile in the wilderness -- all through the pages of history, ancient and modern, is pictured man's persistent attachment to a permanent abiding place, let it be palace or hovel. The crust of the old earth is permeated with the blood of millions who have died because of the love of that sacred place called HOME. History, however, fails to record the case of any man ever taking up a musket in defense of a boarding house. In spite of their pioneering instincts and notoriously itchy feet, or perhaps because of the same, HOME really means more to the American people than to any other race of men on earth.

To a large percentage of Forest Officers, Supervisors, Rangers and others, HOME has ceased to have much meaning. Some few, perhaps, in their transient years have an inkling of their ultimate destination but the average man is coming to regard his present location not as "HOME", but merely as a stopping place before another take-off. Some time, perhaps, when hard-won freedom comes at the age of 60, 65 or 70, if he can go that long, he may be able to locate among strangers, plan and pioneer a new HOME but not now with the worry of what next spring's bust-up may bring forth -- for the proverbial spring moving day of the city apartment house dweller has apparently changed its locale to the timbered slopes of the western mountains.

The reasons? Well, two main ones -- the good of the Service and the good of the man. Others are somewhat minor to these. First down, -- Training: -- The necessity of seeing the Forest Service world, -- for it is quite possible that cows do not chew their cuds or vaqueros throw their lassos quite the same on the Los Padres as on the Modoc. Then too, tree roots may be deeper and bark thicker on trees at the foot of Mt. Lassen than on the west side of the Sierras, so possibly these things must be learned first-hand. Second down, -- Provincialism; -- Forest Officer Jones of Jones Creek Ranger Station is getting too much of the local atmosphere of the nearby city of Jonesville. He belongs to lodges there, his wife is a member of the Methodist Church and Women's Club, his kids are winning prizes in the Boy Scouts and local schools, and, believe it or not, the natives are actually weeping on his shoulders about matters connected with their own special conservation problems. These problems loom large to Ranger Jones because that wonderful mountain country of which Jonesville is the center is HOME to this same Ranger Jones. A third down is the fact, between you and me, that Forest Officer Smith of Smithville does not get along well with millionaire Graball and, after all, Graball has quite a lot of influence at the Capitol. The fourth down is an unknown quantity and may run into the fourth, fifth, and sixth dimensions. Jones must leave Jonesville and Smith, Smithville for the reasons stated above. Quite simple, you say: merely swap places. Oh! No! Jones heartbrokenly goes to Fryville and Smith with his saddened family is relegated to Desertville where the air is purer and the politicians are of smaller caliber. Then Doe from Desertville comes to Jonesville and Crow from Crowville goes to Doeville and old Jimmie Fry goes back to Crowville after an absence of ten years -- to face changed conditions and try to get his tired feet back in the paths he blazed twenty years before; -- again simple, isn't it? However, one pauses to wonder how many heartaches resulted from this HOME-breaking process.

This is not written in the slightest way with a view of criticizing any Forest executive in Washington, Regional Offices, or anywhere else, but as a matter of questioning a personnel policy already abandoned by leading corporations when they found that the roving assignment policy was unprofitable to the organization and morale-cracking to the personnel. Even Army and Navy personnel, whom we mentally classify as the champion nomads of the United States, barring national emergency, are fairly certain of two, three, or five years at one station or location.

Last week on the local unit three statements in a period of two days rather crystallized our thoughts along this line. One came from a prominent person outside the Service and the other two were remarks by District Rangers' wives. Both District Rangers are nearing middle age and both fit in well with their district environment and work. Mrs. District Ranger Number One in substance said: "We love it here, the kids are doing well at school and we all have better health than when we were at .... But each year at this time I have the jitters for two or three months wondering if we will be included in the spring shake-up and if we happen to be victims, I worry whether my new furniture will fit the next house, what kind of people they have around the country where we might go, if Junior will get along as well in school, and about a hundred other things." Next day, Wife Number Two broke out with: "You won't let them take us away from here, will you? I really don't mind talking to the people and answering the phone for Joe -- it gives me an interest in his work. We felt bad about being sent here in the first place, but now we like it and want to stay. I love my yard and flowers and am selfish enough to dislike the idea of some other woman either reaping the benefit of my hard work, or worse still, maybe, neglecting my nice flower beds. This is HOME to us."

Maybe our transient ranger policy is in keeping with national trends, but, somehow, we have the feeling that most of our mountain people, HOME-lovers and generally of the "stay sot" type, really think a lot when they shrug their shoulders at the sight of constantly new faces above the heather green uniforms.

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COMMENTS

"The story undoubtedly will strike a responsive chord in most of its readers but the reaction will not help to solve any problems unless it is followed or accompanied by another version of transfers which points out the weak spots in the presentation of Nash-Boulden and Brown."

"The assumption that everyone pines to take root and settle down on one little plot of ground is only partly true. A great number of our officers do not object to transfers, particularly in their early years in the Service. In fact, many welcome transfers - recognizing the educational and broadening effects of service in different fields."

"The article offers no remedy and unduly stresses minor reasons for transfers being made. The fact that transfers are necessitated by line promotion policy and frequently are accompanied by promotions in pay should be given more weight."

"The statement relative to corporations is wrong. Corporations do a lot of shifting. As for the Army and Navy!!"

"Our people are probably as permanent as the average in the United States, i.e., renters, teachers, etc."

"The authors fail to mention that transfers to prevent provincialism are different from transfers caused by the effects of provincialism on official work - due to some weakness in the employee make-up. Some rangers have been on one forest for 25 or 30 years and their effectiveness has not deteriorated because of provincialism."

"Actually we do not have a 'transient ranger policy', as pointed out in the article. Promotions, training assignments designed to prepare men for higher responsibilities, failures of some men to meet demands of their jobs, shifts in activity emphasis on units, changing budgetary requirements, reorganization plans, retirements, and, yes, occasionally political pressures - all these and other real and not imaginary factors must be weighed against the personal and official advantages of letting men remain in one place for long periods."

"Without doubt many of our mountain people shrug their shoulders at the sight of constantly new faces above the heather green uniforms, but the majority of our forest users today are not mountain people. They are from the lowlands and the cities and they want information, courteous treatment, and services of many sorts. They are not much concerned with a change in rangers, provided the new one knows his stuff."

HERE COMES A FUTURE CHIEF

"We neither smoke nor drink. We are both six feet tall and weigh between one hundred seventy and one hundred eighty pounds. We both have worked out of doors most of our lives and we like it. We do not especially want to go to Alaska to get in the Forest Service but we find it necessary to do so. Some day I am going to be the Chief of Forestry here in the United States and if you gave me the start you would have my gratitude forever. Then you could say with pride that you had helped put the Chief of Forestry where he was. All we ask is the chance, which I know you will give us. We will show our gratitude by the quality of our work."

(Extract from a letter received in Region 10 from a Forestry student)

THOSE PERSONNEL QUESTIONNAIRES

By Margaret W. Howard, Department Office of Personnel

A few weeks ago the Washington Office of the Forest Service received an unusual request. Its cooperation was asked by a committee in charge of refugee settlement in order to provide men technically qualified in agriculture for a new project. A plan had been worked out for the settlement of refugees on the island of Santa Domingo. Several conservation camps had been proposed as a means of improving the agricultural resources of the island and the Forest Service was asked to make recommendations for the position of superintendent of work camps.

The Forest Service transmitted this request to the Office of Personnel in the Secretary's Office. The superintendent's position would pay from $3200 to $3500; the candidates should have had experience in managing conservation projects; they should have technical training in conservation; they should be able to speak Spanish, and, preferably, German.

Two years ago it would scarcely have been feasible to fulfill such a request. There are over 60,000 regular employees of the Department and it would have been practically out of the question to review a corresponding number of individual records. Since 1938, however, qualification punch cards had been prepared for all permanent employees of the Department. The Office of Personnel sorted out the cards and listed the ones for employees who spoke Spanish, who were making a salary of $3500 or less, and who had experience in soil conservation. In this manner a list of approximately 108 cards was obtained. The files of these employees were reviewed in detail, and data on fifteen candidates referred to the Forest Service. From this number the Forest Service recommended four to the committee in charge of refugee settlement. The request had been serviced rapidly with very little man labor. How does such a system operate?

To provide an adequate answer to this question it will be necessary to turn back to 1938. At that time a more comprehensive personnel program was adopted by the Department. The policy of making promotions wherever possible from within the Department was strengthened. As a tool in the administration of this promotion policy improved records were necessary in the central Office of Personnel. A Personnel Questionnaire was therefore drawn up and sent to permanent employees of all Bureaus.

Probably many employees who were asked to complete these questionnaires thought this was "just another form" which would be filed away. These employees were only partially correct in their assumption. The questionnaires were filed away in the central Office of Personnel in the Department but before they were filed away data on experience, educational training, and language ability were coded, and the information placed on "qualification punch cards." These cards serve as an index to the central personnel files. Thus, when a Bureau requests the Office of Personnel to suggest candidates for a particular vacancy, it is a simple matter to identify employees who meet the requirements of the vacancy.

This is possible because "panels" of employee records have been run off by means of the punch cards and the sorting and tabulating equipment. These panels may be arranged on the basis of experience and of education. Records of employees who have varied backgrounds are likely to turn up on a number of panels. Employees' records are placed on panels in ascending order by salary level. As an example of the type of information that is available in the panels, there follows an interpretation and the code record for one of the candidates for the position of camp superintendent in the Santa Domingo refugee settlement:

> Male and white; forty years of age; legal residence in Arizona. He has a B. S. degree in Animal Husbandry with a minor in agronomy. He speaks and translates Spanish. His three fields of experience are work as a soil conservationist, as county agent, and as a manager of a stock farm. The first two of these were federal government positions, the third a private enterprise. He has five years of experience at a level of $2500 - $3000 in soil conservation, nine years or more at $3000 - $3600 as a county agent, and the duration and level of the third position are not indicated. His present title is Soil Conservationist, P-2, $2600 per annum. He is in the Soil Conservation Service with headquarters in Colorado.

Examination of his record verifies the facts given above and shows in addition that his present duties include supervising and directing Soil Conservation Service Camp activities; he had assisted in the operation and management of a 1000-head cattle ranch in Arizona. His County Agent experience was in cooperation with the University of Arizona.

These panels are in daily use in the Department's Office of Personnel. Recently a request was received at 11:30 a. m. for a $2600 purchasing officer; the executive wanted candidates immediately. Within two hours a group of personnel records, ten or twelve prospects from different Bureaus of the Department, was assembled for his inspection.

Panels similar to those in use in the Department Office of Personnel can be furnished to the Bureau personnel office. These Bureau panels assist in determining whether or not there are qualified employees eligible for promotion or transfer to the vacancy. It is only after the Bureau finds it has no one qualified for the vacancy in question that the Department comes into the picture. The effort then is to provide opportunity for transfer and promotion between Bureaus of the Department. The qualification card and the panels are valuable equipment in the administration of the promotion policy.

THE FRUITS OF THEIR LABOR

By Foster Steele, Mount Hood

Bordering the east boundary of the Mount Hood Forest and within District Rangers Walters', Gordon's, and Lynch's zone of influence live a great people. These folk are farmers, ranchers, woods workers, and small business men. They represent a good cross section of Western America's rural and urban population. Their patriotism, citizenship, and interest in public affairs are outstandingly high. Their acts are not confined to lip service but to deeds which speak much louder than words. Community interest in their National Forest is not exceeded anywhere.

Evidence of their interest, loyalty, and confidence in forestry is best expressed in their attitude towards fire prevention and suppression, and in timber management. In this area of 900 square miles live approximately 25,000 people, about half of whom reside in small cities and towns. The other half are farmers, stockmen, loggers, and sawmill workers. From among these people the District Rangers have enlisted nearly 400 men in organized and trained fire fighting crews, many of whom for 15 years have been going to forest fires at the call of their District Ranger, often going without waiting for the call. Logging and sawmill operators, farmers, and stockmen have closed down their operations, their mills, their thrashing machine and harvesting crews that their men might go to a fire burning on their forest. County officials have purchased radio equipped fire tanker trucks with pumps, fire hose, and fire fighting tools, and manned them with trained operators who are on duty day and night throughout the fire season. They have announced their intention of harvesting county-owned timber under the selective logging system advocated by the Forest Service. Loggers, mill men, woodcutters, and others whose business it is to work in the timber have requested the Forest Service to keep them advised on burning conditions in order that they may close down when it is unsafe to work. Farmers operate fire danger stations with equipment furnished by the District Ranger and report their recordings faithfully to him. County courts and individuals pay the Forest Service to dispose of their slash in order that it may be done safely and without injury to standing trees. Schools, churches, the American Legion, granges, and other organizations carry on campaigns of fire prevention and for better forest practices in the management of privately owned timber.

There are no State laws for eastern Oregon to regulate woods operations such as apply on the western slope, yet these people voluntarily impose upon themselves comparable restrictions. Incendiarism is unknown here and the new settler is quickly educated by his neighbors to be careful with fire in the woods.

Why are these people so forestry minded and so fire conscious? Is it a local economic influence? Or is it the result of carefully planted seed sown in fertile soil over a period of thirty years by patient foresters with a vision and with confidence in their cause?

MORE ABOUT "FOREST SERVICE MODERN"

By R. L. Barber, Wallowa

The article by Jane Snyder in the February 19 issue of the Service Bulletin seems appropriate. No doubt we can all agree that no harm would be done if the stenographer's initials were typed on letters. Whether similar agreement can be reached regarding the suggestion of also following general practice and typing the author's initials is a somewhat different matter. We cannot gainsay that appearance of the author's initials would disclose that the particular suggestion, idea, or reply did not result from intellectual effort by the executive who signed it. In commercial fields however the general manager would not be interested in personally signing all letters written by the credit, collection, sales, or employment departments. The heads of corporations would hardly look with approval upon high executives devoting time to such details.

Why not type "BLANK NATIONAL FOREST", with the customary "By", and the actual title of the signer? True we have the Forest name printed in small letters in the heading, but modern commercial practice shows the name of the corporation typed in capitals at the end of each letter where it cannot fail to come within the line of vision.

Are we really advertising the National Forests and Forest Service or individuals connected with the Forest Service? Could our method of signing have any bearing on the fact that some people still talk about "Forest Reserves" when mentioning the Forest Service? Are we passing up an excellent advertising possibility when we fail to capitalize the name of our Forest or Service after the "Very truly yours"? Would it not more firmly impress our Service upon the public mind if they also addressed their own letters to The Blank National Forest or U. S. Forest Service instead of asking them to address some executive title?

RANGER STATIONS

By Edward Ritter, R. 7

Could it be nostalgia or was it merely a normal overflow of a suppressed desire to get something off one's chest that urged Major Guthrie to give all architects the count of nine? (Service Bulletin - March 18.)

Whether the roof under which a Ranger lives is called a Station or house, there has nevertheless been a remarkable improvement in arrangement and convenience of structures built during the last few years. Most everyone will agree that a modern bathroom is tops over an improvised shower (water barrel, spigot, and perforated tomato can) set up in the woodshed or backyard. And many Stations located in the forest, New Deal models, don't look so bad, at least to one untutored in architectural design.

Are the dwellings in town inappropriate in design, or were the sites poorly chosen? In either case, who was responsible -- architect or administrator? I am inclined to believe the men on the ground may have influenced both selection of site and design.

MANAGEMENT AND RESEARCH IN INDUSTRY

(From Science Magazine of February 23, 1940)

Key jobs in the upper ranks of industry are awaiting an oncoming generation of young men now receiving their scientific or technical training in American universities. They are needed because industry is increasingly tapping the frontiers of scientific knowledge by research.

If any one message came out of the meeting of the American section of the Society of Chemical Industry on February 16 it was that, right now, industry needs men who can serve as the liaison link between the presidents of industrial companies and the research men those industries employ.

Increasingly, said Dr. E. C. Williams, director of research and vice-president of the Shell Development Company, technically-trained men are finding their way on to the directorate boards of companies. But until the day when every industry follows this practice there must be better links between management and research.

Misunderstanding may arise out of the backgrounds of research and executive leaders Dr. Williams continued. The executives - handling finance, commercial and organizational affairs - are influenced greatly in their decision by human relationships. The executive technique is accomplished through persuasion, compromise, leadership and personal determiations. The training of research men, in contrast, has no place for personality or persuasion because a scientist deals with coldly material things like the properties of matter and forces of nature which are outside the realm of human things. To bridge the gap between these two poles is the need of every industry. The top executive needs to be aware, that he, himself, by his own decisions, can cloud true issues.

A statement or a wish by the president of a corporation, Dr. Williams declared, may acquire such importance that its mere expression may make that belief a fact. Dr. Williams pointed out that "If the president of the U. S. Steel said he thought steel was likely to go up, it very likely would go up. What might not have been a reasonable happening before he spoke actually becomes a fact because he spoke. If anyone else had said so there would have been no such effect. Thus the mind can create actuality."

Every company needs, too, someone who can present to the executive the true picture of scientific training which makes research men sometimes argue over precise definitions of established facts, or over technical matters on which differences of opinions are permissible. The executive often thinks these arguments indicate serious rifts between his advisers or a troublesome disposition (dread of all business men), whereas the scientists are really enjoying themselves because no one's personal prestige is at stake.

Dr. Williams continued: "The research director is a kind of crystal gazer to industry, without the hocus-pocus. The picture in the crystal for a year ahead is rather clear; further into the future it may be blurred, yet formed in its main outlines; even up to five or ten years ahead dim forms can be seen through the fog. These are not unsubstantial dreams; they are definite indications of future movements in industry."--Robert D. Potter.

THE EDITOR DISCOVERS

"There is all too much of the masculine pronoun in Forest Service contemporary literature. One not in the family gets the impression that our Service is not co-educational," wrote Assistant Chief Granger in the Service Bulletin last Christmas.

Forest Service wives and women employees of the Service, though often unheralded and unsung, have earned a listing well up at the top of the roll. Faint whispers of their works have resounded here and there, now and again, and these whispers indicate that the full stories about the Service women who have "pinch hit" for their ranger husbands in emergencies, who have run fire camps, served as crew bosses, pioneered in new offices, or helped along the work in many other perhaps less spectacular but equally important ways, would be an important addition to Forest Service history and lore.

The Washington Office Division of Information and Education is anxious to get such stories as background for magazine and radio material, and is appealing to wives and women of the Service to write in and tell about any unusual jobs or adventures, incidents or interesting experiences that would round out a compilation of women's part in Forest Service history. Whether it happened yesterday or back there in the early days, the Division would like to have it, so send you stories to Miss Armella Friedl, I & E, U. S. Forest Service, Washington, D. C.

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How the City Council of Mitchell, South Dakota, appropriated money so that the forestry program in that district might go forward unhampered is told by E. L. Perry of the Prairie States Forestry Project. The City Council appropriated $100 to be used to continue the services of two ERA clerks in the District Office of the PSFP at Mitchell, who were suspended by the WPA in accordance with the 18-month continuous employment rule. "This lay-off coming just at the beginning of our planting season," says Mr. Perry, "was a hard blow to the District office, since it would have taken some time to train new people, and this action by the City Council will assure that the trained clerks will remain at least during the planting season."

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Radio Engineer Gael Simson tells us that the question of the present status of television transmission and the feasibility of its general reception by the public was the subject of recent extensive hearings before the Federal Communications Commission. Because of the fluid state of the art and the continuance of research and experimentation, the Commission declined for the time being to establish television transmission standards. Not all types of television transmission can be received by any receiver, and in the present state of the art it is impossible to decide what type of transmitter will be made standard, the Commission points out. More research and experimentation will be necessary, and is being conducted, before any such standardization can be achieved. "Television is here to stay," the Commission states, "but conceivably present day receivers may for practical purposes be gone tomorrow."

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E. L. Perry of the Prairie States Forestry Project reports that the motion picture "Trees to Tame the Wind" is having a very good reception in the Project area. He says: "The first communication on the subject from the field has just come in from one of the field men in Nebraska and contains the following quotations:

"'The theater operator at St. Edward stated it was the best educational film he had ever shown.'"

"'One of the persons attending the showing at Central City states there was considerable comment regarding our film after the show--in fact, much more than on the feature film.'"

"We ran the film a full week in one of the major theaters in Lincoln and the manager was quite enthusiastic about it. He asked to have it again in about a month for one of the other two theaters in the city under his direction. In the meantime we are running it in an independent theater in the suburbs."

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In a campaign to boost sales the Government Printing Office will soon place in 50,000 postoffices an illustrated poster describing its more popular publications, and giving the prices of some of Uncle Sam's best sellers, according to an item in a recent issue of "The New York Times." Included in the list of best sellers is "Famous Trees" by Charles E. Randall and D. Priscilla Edgerton, Forest Service, Miscellaneous Publication No. 295.

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Region 8 has prepared a Prospectus for the Mount Magazine Lodge, located on the Magazine Ranger District of the Ouachita National Forest, Arkansas. The lodge and development of the recreational area are expected to be completed soon after June 1. The facilities offered for consideration by eligible permittees are: a lodge, a servants' dormitory, 18 rental cottages, a concession building, a power generating station, and a water and sanitary system. Anyone interested in running a hotel of this kind should get in touch with the Forest Supervisor at Hot Springs, Arkansas, or the Regional Forester at Atlanta, Georgia.

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SERVICE BULLETIN

Contents FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE Confidential

Vol. XXIV, No. 9 Washington, D. C. April 29, 1940

LANDSCAPE OBJECTIVES ON NATIONAL FOREST ROADS

By Harold L. Curtiss, R. 4

With the tremendous advances in highway transportation planning and construction in recent years there has developed a growing realization on the part of the forward-looking engineers of today that the reduction in maintenance costs and the improved appearance which go hand in hand with the landscape development of National Forest roads are part of a definitely discernible trend toward higher standards.

The selection of design standards which will be ahead of the times and yet within economic reason continues to be one of our major problems. Outstanding in these forward-looking developments is the divided lane system of separating traffic moving in opposite directions; the design and construction of grade separation structures, underpasses, overpasses, cloverleaf grade separations, etc.; the establishment of the "parkway" and "freeway" principle of limited access, and the stabilization of subgrades.

A fifth phase of our modern developments is a trend which is receiving rapidly increasing recognition: the landscape development of highways.

Whether it be on the most primitive truck trail, on our hard surfaced highways in the mountainous regions, or on our multiple lane divided highways of the metropolitan areas, the principles of good landscape design are solving the problems in this new and interesting field.

Recent projects have demonstrated the fact that we have outgrown that type of so-called "roadside beautification" which is limited to the planting of trees and shrubs. This is only one of the four or more phases which are now generally recognized as component parts of the landscape development of highways. These are (1) Location and alignment, (2) Design of the highway cross section, (3) Erosion control and drainage, (4) Planting design, construction and maintenance.

First and foremost among the landscape objectives in present day highway work is the location and alignment of the road itself. The progressive engineers of today are seeking to so handle this that the road will combine the elements of speed and safety with the minimum disturbance of the natural environment.

Good alignment from a landscape point of view is one which will reduce drastic departures from the natural lay of the land, and which will effect a harmonizing of construction with natural topography by coordinating the skill of the locating and designing engineer with that of the landscape architect.

In a great deal of our work the landscape is the problem. What we do with the landscape will have a material effect on the successful solution of the project. It has been truly said that the best landscape job is the one which shows the least evidence of man-made improvements.

An increasing number of our far-sighted highway engineers are recognizing that the use of long radius curves in place of long tangents is one means of stimulating in a motorist the sense of beauty, of dispelling monotony and of fitting the road to the natural environment. Particularly in our heavily timbered areas the long radius curve is of value, for it offers less conspicuous sky gaps in the trees, and presents a constantly varying and unfolding picture imbued with natural charm.

It is generally recognized by the best highway engineers that a fringe of trees along the bank between the stream and the highway enhances its beauty and that the most attractive location is one which at times affords a full view of the creek or lake, at other times a partially disturbed view, and again with the water entirely out of view.

Another method of attaining the landscape objective of the conservation of inherent natural beauty lies in keeping to the minimum the making of channel changes when locating highways along streams in mountainous country.

During a recent inspection of a proposed realignment of a forest highway located in a particularly scenic canyon of high recreational value, one could not help but note the progressive attitude of the landscape architect with respect to several proposed channel changes. He held the viewpoint that the undisturbed natural beauty of this particular canyon was the priceless recreational asset which drew thousands every year to this area to enjoy its scenic and inspirational values, and that therefore any construction which would deface and mar this natural beauty should be held to the minimum. He emphasized the fact that even though a bridge would be necessary if the channel changes were avoided, its added costs would be more than offset by the advantage of retaining the picturesque and wild scenic character of this mountain stream.

Another fundamental of landscape engineering is to select locations where the road does not cut into the center or go through open meadows or parks. Illustrative of this principle is the proposed realignment of a forest highway inspected last summer. The present highway traverses a series of high mountain parks, cutting down through the center of a number of them, dividing these lovely sylvan pictures into two distinct and separate parts. To an engineer trained in appraising and evaluating landscape values the earlier treatment of these roads seems unfortunate. On this particular project a report on the scenic and aesthetic factors involved in the proposed realignment was prepared and as a result the alternate route keeps the road well up in the fringe of the timber. Such a location will afford a series of attractive vistas cut over these open meadows from within the forest, rather than throwing the whole panorama open at one glance.

The eagerness and intelligent interest with which these landscape objectives have been attacked by the Forest engineers throughout the country within the last few years give promise of substantial progress toward a higher standard of location and alignment.

(The foregoing is a highly stimulating and valuable contribution to a subject of major importance to the Forest Service. Mr. Curtiss would doubtless gladly acquiesce in adding to the end of his last paragraph - "and roadside treatment" - T.W.N.)

ALCOHOLISM AS A PERSONNEL PROBLEM

By Bruce Torgny, Uncompahgre

(Although, fortunately, the incidence of alcoholism as a personnel problem in the Forest Service is probably as low or lower than in other comparable organizations, it is a real problem where it exists. The following article suggests sympathetic and intelligent approach to this problem and is recommended to all Forest Officers. - Ed.)

This article is written on the premise that, like myself, the average Forest Officer knows little or nothing more about alcoholism than the word itself implies. A cursory review of literature on the subject of alcoholism reveals a great deal of conflicting information, for, says one authority, "In alcoholism the Church sees only sin, the world sees only vice, the State sees only crime, and medicine sees only disease."

Considering the large percentage of teetotalers in the Forest Service, and the many others "who can take it or leave it alone", alcoholism as applied to the average employee hardly presents itself as a problem worthy of mention. But when reckoned on a Service-wide scale, alcoholism as a particular problem appears in a much stronger light - a red light that we cannot justly ignore.

As an example in point, it is a fact that: Of all personnel cases referred to the Chief's Office for disciplinary action, forty percent show excessive use of alcohol as a basic link in the usual chain of events leading to formal charges of misconduct.

This fact is a distinct challenge--not only to individual supervisory officials but to the Forest Service as a whole. A large number of supervisory officials feel a definite responsibility, or a share of responsibility at least, for the downfall of these unfortunate fellow-workers, I know. And through properly-timed, sympathetic, and intelligent action on the part of these officials more personnel cases traceable to alcoholism are averted than is generally realized.

But there are other instances where every indication points to the fact that our methods have been archaic in the extreme. Whereas a patient search for the cause and effect is called for, we have all too often made a moral issue of alcoholism--which is probably one of the least constructive things we can do.

If we condemn a man's excessive drinking without considering the underlying reasons -- overwork, weight of responsibility, family troubles, financial problems, environment, women, or whatever--we are more wrong morally than the man himself. Authorities tell us: "Drinking is not the disease but merely the symptoms. What is needed is not the reformation of the man but the integration of the man. Once a man has gained mental equilibrium he no longer needs to seek the fugitive support of alcohol. The symptom disappears when the disease is cured."

And referring again to the authorities we find them generally agreed that no two alcoholic cases call for exactly the same kind of treatment. Each patient, they tell us, requires individual attention, for what may be meat for one is poison for another. And thus in so many of our cases where we have conscientiously tried to "meet like offenses with like penalties" the reason for our failure is undoubtedly pointed out to us.

Although my purpose in this is to direct attention and to suggest rather than to prescribe, there are certain considerations that seem to be outstanding. To illustrate let's take a hypothetical case:

Forest Officer John Doe goes on a real bender--his first known offense. His superior hears about it and taking John aside says: "John....(You tell your own first warning)." Then a couple of months later, John goes toppling off the wagon again. This time a letter is written designated "K-Personnel." And this brings a reply: "I promise faithfully never to....." And John lives up to his promise and the story is ended. In this instance the right treatment is given and a personnel case is averted.

But, on the other hand, supposing John has what is described as the true alcoholic make-up and we learn to our sorrow and John's too, that his word is no good. He slips again, and we realize that we are dealing with an altered individual, an individual no longer to be trusted and therefore unable to discharge the responsibilities of his position. What then?

Is the regrettable but necessary recommendation "...that formal charges be made looking toward the separation of John Doe, with prejudice and without accrued leave" the answer? Is John Doe--a confirmed alcoholic, a sick man if you please, a man with a rapidly diminishing number of friends and jobless--to be left to face his problems, a potential derelict headed for the gutter? There was a time, you know, when we thought John was a pretty good man or we wouldn't have hired him.

The Forest Service cannot condone drunkenness under any circumstances. But supposing as a part of our responsibility we had been on the alert for the first symptoms of John Doe's alcoholic inclination. And that on discovering these symptoms we had taken him aside and tactfully called the fact to his attention with the hope of enlisting his cooperation in voluntarily consulting a psychiatrist, or his own family physician who can usually be depended upon to recommend a qualified specialist. (Upon numerous occasions such action has brought good results.)

Treatment for alcoholism is generally successful only when the patient is made to recognize that there _is_ an underlying reason for his resort to alcohol; and only when he recognizes what that reason is and voluntarily cooperates to effect a cure. No specific drug nor course of treatment will ever render an alcoholic permanently free from temptation. Treatment and cure can be founded only on common sense and sound psychological principles designed to convert the alcoholic to the realization that for him total abstinence--even beer--is the only safe course. Suppose instead of condemning John Doe for a lapse in morality we had originally approached him with this enlightened understanding.

Suppose we recognized, too, that home treatment in advanced cases without benefit of expert advice is seldom satisfactory. That treatment in institutions or under physicians of recognized standing is preferable. The treatment ordinarily consists of rest and tapering off in the use of alcohol, at which time sedatives may be administered. This is followed by change in occupation, with stress being given to physical training as an indispensable factor, especially training involving the use of hands. Walking is generally not recommended because walking becomes mechanical and automatic, leaving the mind free to brood over worries, real and imaginary. Suppose also that we recognize that lack of work, anxiety, and boredom are particularly dangerous to the individual having the alcoholist's make-up. That for these reasons suspension of duty without pay as a penalty for alcoholic offense--unless offset by an effected change of environment during the suspension--is often more injurious than helpful. And finally suppose that we offered the alcoholic something definitely concrete, like new duties, new responsibilities, and new and varied assignments.

Would these considerations and actions on our part obviate the necessity for that final recommendation in the case of John Doe? Would they have saved some of those deplorable human failures for which we are certainly partly responsible? I certainly don't positively know, but I ask because my reading on the topic of alcoholism leads me strongly to believe that they would.

We are entering a new era--an era in which the National Forests and the Forest Service are designed to play an increasing role in stabilizing family life. Is it pertinent, therefore, to say that our social responsibilities should begin with our own less fortunate fellow-workers? I think it is!

THE PLACE OF FORESTRY IN AGRICULTURAL PLANNING

(Based on "Report on the Progress of Land-Use Planning During 1939"
compiled by BAE and Extension Service, January 31, 1940)

By Lyall E. Peterson, Washington

Organized effort in planning for a permanent agriculture - that is, the county agricultural planning movement - has been on trial for one year. The results from most angles are altogether encouraging.

The CAP program has already reached 1,120 counties in 47 States. Enthusiastic reception of this program is indicated by the fact that there are now some 70,000 farm people serving on 7.927 local committees. Participating with farmers, in one or more of the States, there are no less than 20 Federal and 24 State and local agencies represented. At the State level, 43 land-use planning committees were active. Forest Service representation was reported on 38 of these committees, while either State Forestry Department or Conservation Department representatives were indicated in 20 States. At the county level, nearly all committees have a AAA representative working with the county agent and farmer members. Most of the counties are also assisted by an FSA local supervisor, while SCS technicians, FCS men, county home agents and vocational agricultural teachers are found in more than a third of all counties. The Forest Service came next on the list with representatives on 237 counties in 36 States. Of this number 139 were working with the "intensive planning" and/or "unified program" counties.

Intensive planning has been carried on in 566 counties during the year. Some of these are still on the fundamental job of classifying these lands and analyzing problems, but 112 have completed primary reports and another 59 counties have sent their reports to Washington.

The real test of county agricultural planning comes with the unified programs, in which an attempt is made to translate necessary adjustments into action programs. The progress on this phase is encouraging in view of the short time which has been permitted any county to develop one of these programs that is so exacting in its requirements. Of the 46 counties selected for unified programs in 1940, nine of them have been reviewed and studied by the Interbureau Coordinating Committee. In all of these nine programs, forestry is recognized as a problem but in most of them there is much room for improvement in refining the treatment of forestry as a part of the whole agricultural land-use problem and in pointing out the ways and means of securing needed adjustments.

The participation in county planning by the foresters of the Prairie States Forestry Project is probably the outstanding example of fruitful effort. In these States the Forest Service has been using the land classification maps developed by local committees to guide them in selecting areas for planting. They have in turn been in position to offer the local committees a wealth of advice with regard to the advantages and possibilities of shelterbelt plantings. In many other States and counties the Forest Service is finding added support for the National Forest acquisition program.

It is interesting to note in the wide scope of problems being considered by the various committees that forestry usually appears as a part of many problems rather than as something separate and distinct. An excellent example of this is the action that is being taken in South Carolina on the Sumter National Forest. Here the local committee saw the need for developing lands along streams for permanent pasture. The Forest Service owns some of this land and has agreed to develop it for this purpose, and in so doing will probably get cooperation from the SCS in clearing the land. Another good example of the tie-in of forestry as a part of agriculture, is in the AAA program. A majority of counties have recommended more liberal ACP allowances for reforestation, etc. Although most of these requests cannot be complied with because of legal or administrative restrictions, they do illustrate the local interest in forestry. (The real opportunity in ACP appears to be in striving to bring about a wider and more effective participation in the now existing forest conservation practices.)

With reference to submarginal land and devastated forest land, it is interesting to note that this movement is stimulating a better understanding on the part of local Government officials. A good example of this is offered in Minnesota, where county commissioners in several counties have agreed to withhold from sale those tax title lands which have been classified as unsuited to agriculture. Another example of the results along this line is the action which is being taken in several Northern Lakes States counties to introduce or refine rural zoning laws. An interesting development in several New England counties is a program which involves the planting of submarginal pasture land to trees and the improvement of remaining pasture in such a way that the same number of animal units can be carried; thus maintaining the farmers' income. This particular development is being made possible through modifications in the AAA program.

The final paragraph in the report contains a sentence which might very well relate to action agency representatives as well as farmers and land owners. That sentence is "The planning process develops in the individual a community point of view."

FACTS AND FIGURES ON SPORTSMENS' EXPENDITURES

(Excerpts from address by John G. Mock, Editor of the "Pittsburgh Press" at the North American Wildlife Conference in Washington March 18-20, 1940)

No other group of sports followers begins to approach, even remotely, the vast sum of money put into commerce and industry, as that contributed by the outdoorsmen of the country.

To begin with, there are approximately 8,000,000 persons who acquire fishing licenses each year and 7,000,000 individuals who make use of hunting licenses..... From the coast of Maine to Florida and from California to Washington a vast army of fishermen enjoy their sport in the ocean depths, where no fishing license is needed. A conservative estimate of the Nimrods and Waltonians of the nation is 20,000,000.

To reach the rural, isolated, and remote sections where hunting and fishing may be enjoyed, also the vast expanse of the seas on either side, requires transportation in some way or another. Rail and air play but a small part in this, the principal method being by automobile. Assured that more than one-seventh of the population of the country is engaged in some form of rod and gun activity, it should be reasonably fair to assume that the same ratio be used in arriving at the number of automobiles used in these pursuits. Based on the national registration, the number of cars involved is 3,608,807. A nominal mileage for a season of hunting and fishing is 500 miles which means that the almost unbelievable total of 1,804,403,500 miles is traveled to reach hunting and fishing. Placing the average life of a new car in the hands of the original owner at 40,000 miles, there is an annual buying demand of 45,110 cars used solely for these purposes. At an average price of $600, the sportsmen contribute annually $27,066,000 toward the automobile industry. When those cars come rolling from the assembly lines they will be equipped with 225,550 tires. In driving the hunting and fishing miles, placing the average life of the tire at 25,000 miles, an additional 72,172 tires will be required, or a total of 297,722 - which is a rather sizable contribution to the rubber industry.

Gas is what makes the wheels turn. On the average of 15 miles per gallon, the sportsmen burn up approximately 120,293,550 gallons of the fluid, or, at 15¢ per gallon, $18,044,550. Changing oil every 1,500 miles, replacing the old with 5 quarts of new, at 15¢, brings the total contribution to the oil and gas concerns at $18,816,235. Assuming gas and oil taxes as being 5¢ per gallon, the sportsmen contribute another $6,087,330 to Federal and State Governments because of their love for hunting and fishing.

Suppose each of the licensed sportsmen spends only $25 throughout the year on fishing tackle and firearms and ammunition, which is a most conservative estimate, since in many instances it equals the price of only a rod, reel or very low-priced firearm. Those industries are benefited to the extent of $375,000,000.

The same conservative estimate of $25 per year, applied to accommodations at hotels, boarding houses, camps and other places of habitation when afield and astream, including the cost of camping supplies, adds another $375,000,000.

The total revenue derived through the issuance of hunting and fishing licenses by the various conservation departments and federal migratory bird hunting stamps, according to the latest available figures, is $21,689,024....

Sportswear such as hunting pants and coats, woolen mackinaws and sweaters, shirts, socks, gloves, shell vests, hunting boots, sleeping bags, not to forget the good ol' red flannels, are purchased to some degree throughout the season. Placing an estimate of $7.50 as the annual average expenditure, and none will deny that this is a most reasonable figure, the hunter must be credited with a yearly purchasing power of $75,000,000.

The same goes for the fisherman, in knee and hip boots, waders, ponchos, fishing vests and jackets, raincoats, fishing hats and the numerous other accessories and gadgets which fishermen adorn themselves with, exclusive of the tackle; thus another $75,000,000 goes towards keeping the wheels of industry in motion.

Nearly every sportsman uses some kind of binocular, spotting scope, rifle scope, still or movies camera, along with the films to keep a record of the one which was caught and the location where the big one got away. If but a dollar and a half per person is expended for such equipment, the total ranges somewhere between 30 and 40 million dollars....

Less than 10 of the Nation's largest industries exceed the billion mark in the value of their products. The sportsman's business equals, if not betters, that of several in this group.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

AUTEN, J. T. Reconstruction of the hardwood forest soil profile by vegetative covers. (Abstract). Jour. Forestry 38(3): 229. Mar. 1940.

BRUSH, W. D. Characteristics of modern woods. 2nd. ed. 53p. Roddis lumber and veneer co., Marshfield, Wisconsin. 1939. (Book review). Jour. Forestry 38(3): 295. Mar. 1940.

BUELL, J. B. Red pine in West Virginia. Jour. South. Appalachian Bot. Club 5(1): 1-5. Jan. 1940.

CHAPMAN, A. G. Problems in forestation research. Jour. Forestry 38(2): 176-180. Feb. 1940.

CHIDESTER, G. H., BRAY, M. W., and CURRAN, C. E. Growth factors influencing the value of Jack pine for kraft and sulphite pulps. illus., tables. Paper Trade Jour. 109(13): 7. 1940. (Reprint).

CONNAUGHTON, C. A. Range and watershed problems. Jour. Forestry 38(2): 164-169. Feb. 1940.

CRADDOCK, G. W Forestry and water. Jour. Forestry 38(2): 141-144. Feb. 1940.

CRAFTS, E. C. Forest service holds range research seminar. Jour. Forestry 38(3): 282-283. Mar. 1940.

CRONEMILLER, F. P. The convict creek test stream. Assoc. Sportsman 7(1): 4, 13. Jan. 1940.

CRUIKSHANK, J. W. The utilization of dogwood in the lower South. Jour. Forestry 38(3): 284-285. Mar. 1940.

CURRY, J. R., and FONS, W. L. Forest fire behavior studies. illus., charts. Bibliography: p. 225. Mech. Engin. 62(3): 219-225. Mar. 1940.

DAY, B. B (With F X. SCHUMACHER, Duke Univ. Senior author). The influence of precipitation upon the width of annual rings of certain timber trees. tables, charts. "Literature cited": p. 429. Ecol. Monographs 9(4): 389-428. Oct. 1939.

FORWARD, C. H. Alaska airplane spruce. illus. West Coast Lumberman 67(1): 19. Jan. 1940.

GRANGER, C. M. National forest recreation. Wild and not so wild. illus. Outdoor America 5(4): 4-5. Feb. 1940.

GUTHRIE, J. D. Finland's forest soldiers. illus. Amer. Forests 46(3): 110-112, 141. Mar. 1940.

HAIG, I. T. A new venture in tropical forest research. (Abstract). Jour. Forestry 38(3): 224-225. Mar. 1940.

HALLAUER, F. J. New farm homes for the building. illus. Amer. Forests 46(3): 115-117, 139. Mar. 1940.

HOUGH, A. F. The Allegheny forest experiment Station. Forest Leaves 30(1): 9-10. Jan./Feb. 1940.

HUNT, G. M. (With SNYDER, T. E. Bur. of Entomology and Plant Industry). An international termite exposure test. Eleventh progress report. 14p. tables. (In American wood preservers' association. Proceedings no. 36. 1940). (Reprint).

LENTZ, G. H. Forgotten hardwoods. Amer. Forests 46(3): 98. Mar. 1940.

LIMING, F. G. Origin and growth of dormant buds in oaks. (Abstract). Jour. Forestry 38(3): 226. Mar. 1940.

MACLEAN, J. D. Relation of wood density to rate of temperature change in wood in different heating mediums. 28p. tables, charts. (In American wood preservers' association. Proceedings no. 36. 1940). (Reprint).

MATTHEWSON, J. S. Effect of storage on the moisture content of lumber. illus., chart. Wood Products 45(2): 12-14. Feb. 1940.

MATTOON, W. R. Pulpwood and the southern farmer. Jour. Forestry 38(3): 288-289. Mar. 1940.

MOWAT, E. L. Damage by logging and slash disposal in Idaho ponderosa pine. tables. "Literature cited": p. 255. Jour. Forestry 38(3): 247-255. Mar. 1940.

NELSON, DEWITT. Fire and forest resources in California. Jour. Forestry 38(2): 108-112. Feb. 1940.

PAUL, B. H. Second growth southern hardwood timber. illus., table. Wood Products 45(1): 12-13. Jan. 1940.

PEARSON, G. A. Forest land use. Jour. Forestry 38(3): 261-270. Mar. 1940.

PHILLIPS, R. E. Skiing in the Rockies. Recreation 33(11): 597-598. Feb. 1940.

RITTER, G. J. (With GROSS, S. T., and CLARK, G. L. Univ. of Illinois, senior authors). Arrangement of the cellulose crystallites in ray cells of white oak as determined by x-rays. diagrs. Paper Trade Jour. 109(23): 37-38. Dec. 7, 1939.

ROWE, DOROTHY. Floyd Dell on writing. Writer's Month. 55(3): 154-157. Mar. 1940.

SCHOLZ, H. F., and STOECKELER, J. H. A lysimeter installation for studying forest influence problems. illus. Jour. Forestry 38(3): 256-260, Mar. 1940.

SHANTZ, H. L.. Agricultural regions of Africa. Part 1. Basic factors. illus. (to be cont.). Econ. Geography 16(1): 1-47. Jan. 1940.

SPARHAWK, W. N. La Foret Quebecoise. vol. 1. Omer Lussier, Directeur-administrateur. Published by La Foret Quebecoise, Enr., Quebec, P. Q. 1939. (Book review). Jour. Forestry 38(3): 293. Mar. 1940.

STICKEL, P. W. Smokers and forest fires. table, chart. Hunting and Fishing 16(9): 12, 20. Sept. 1939.

STEWART, GEORGE. (With A. B. YOUNG, Soil conservation service). The hazard of basing permanent grazing capacity on Bromus tectorum. tables, charts. Amer. Soc. Agron. Jour. 31(12): 1002-1015. Dec. 1939.

SWEET, C. V. Plywood in relation to the veneer industry. Wood Prod. 44(12): 19-22. Dec. 1939. Appears also in Barrel and Box and Pkgs. 45(1): 7-9. Jan. 1940.

TIEMANN, H. D. Lessons in wood technology. XX. Shrinkage. How does wood shrink. diagrs. South. Lumberman 160(2013): 47-49. Feb. 15, 1940.

TRUAX, T. R. Chemicals in forest fire control. Natl. Fire Protect. Assoc. Quart. 33(3): 252-259. Jan. 1940.

WOHLENBERG, E. T. F. Forest depletion: Federal tax allowance for selective logging. Jour. Forestry 38(2): 113-116. Feb. 1940.

WYCKOFF, S. N. A program of education and cooperation. Jour. Forestry 38(2): 92-94. Feb. 1940.

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The list of "Articles by Members of the Forest Service appearing in Outside Publications" should include all signed articles by Forest Service workers appearing in all books, serials, and journals, except newspapers and Department of Agriculture publications. This list is reprinted in various publications as the total output of Forest Service literature falling within this category. It is highly important, therefore, both from the standpoint of keeping accurate records and from the standpoint of professional prestige and advancement that the list be complete. At present it is far from complete because the only method of gathering these references is in connection with the regular scanning and indexing of periodicals. It would be a great aid, therefore, if each Station, Region, and the Divisions in the Washington Office would furnish the Library with copies of publications by their members when available, or with the correct complete citation of these, as soon as possible after they appear in print. This list is compiled in the Library about the 4th of each month.

THE EDITOR DISCOVERS

It is natural that many men in the Service are thinking of ways in which to do honor to the memory of Mr. Silcox. Among others, the Regional Forester of Region 2 has wished to have the services of our late Chief in organizing what are now the Montezuma and San Juan Forests in the winter of 1905-6 commemorated by naming for him some prominent feature in those National Forests. His first proposal was to change an unsatisfactory name for a mountain to Mt. Silcox. This name, however, has been preempted by thirty years of map usage, Forest Service, Corps of Engineers U.S.A., and Geological Survey, for a prominent peak in the Cabinet Forest, overlooking the valley of the Clark Fork and used as a triangulation station and as a lookout. The Acting Chief has therefore decided, with the concurrence of all Assistant Chiefs who were in Washington at the time, that it is best not to attempt to name another mountain for Mr. Silcox and that the naming of additional geographic features in his honor should be confined to some other feature or features than mountains.

Mt. Silcox in the Cabinet National Forest, Montana, has an elevation of 6,855 feet and is located about 4 miles northeast of Thompson Falls, the headquarters of that National Forest. The name appears on the Forest Atlas sheet for this portion of the National Forest published in 1909 and it has appeared on all administrative maps of the Cabinet Forest since that time. It also appears on the Thompson Falls quadrangle sheet published by the Geological Survey in 1937. Its use as a triangulation point has led to the accurate determination of its location as Latitude 47°38'.89", Longitude 115°16'49.90".

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The organization meeting of "Friends of the Land," held in Washington, D. C., March 22-23 and which was mentioned in the April 1 issue of the Bulletin, was attended by fifty-two citizens of thirty-eight States. Morris Llewellyn Cooke was elected President, Charles W. Collier was elected Executive Director, and Russell Lord was named Editor. There will be ten Vice Presidents and a board of forty trustees. The following were elected as Vice Presidents: D. P. Fabrick (Mont.), F. S. Hurd (Okla.), J. E. Noll (Mo.), J. S. Apperson (N. Y.), O. U. Habberstad (Minn.), George A. Condra (Nebr.) Aldo Leopold (Wisc.), J. N. Darling (Iowa), and Charles E. Holzer (Ohio). On the board of trustees are R. G. Tugwell, Paul Sears, Dr. Isaiah Bowman, Stuart Chase, Aldo Leopold, J. N. Darling, and Dr. J. Russell Smith.

"Friends of the Land" will publish a monthly magazine, "The Land", maintain a Washington office and field auxiliaries, and seek to advance the idea that conservation is an essentially coordinated undertaking, both here and abroad. Organized outside the Government, the new society will seek subscriptions and backers among citizens in general, both within the Government and without.

Further information about the organization can be obtained from "Friends of the Land", 312 Denrike Building, Washington, D. C.

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R. W. Graeber, Extension Forester for North Carolina, writes:

"During the spring of 1939, this office conducted five training schools for A. A. A. compliance supervisors in that number of counties, giving them instructions as to how to check the compliance on the forestry practices in their respective counties.

"In the month of January, 1940, this office, cooperating with other Extension specialists, conducted twenty training schools for A. A. A. committeemen in a similar number of counties. These were one-day meetings. However, we had an opportunity of discussing in detail with the committeemen the various steps necessary. One way to make further improvements over the type of school we held would be to have part of the meeting right out in the field. However, weather conditions in January did not permit this type of meeting.

"I am passing this information along to you to let you know that we are, in the field, helping the Agricultural Adjustment Administration in putting over a real forestry program."

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Several very attractive and interesting bulletins have recently been issued by the Forestry Branch of the Department of Lands and Forests, Ontario, Canada. They are:

"Forest Tree Planting" by Arthur Herbert Richardson, Bulletin No. 1
"The Farm Woodlot" by I. C. Marritt, Bulletin No. 2
"The Care of Trees" by Arthur Herbert Richardson, Bulletin No. 4
"Forest Trees for Distribution", Circular No. 10
"Windbreaks and Shelterbelts", Circular No. 11
"Trees for Schools" by Arthur Herbert Richardson, Circular No. 15

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The following will retire from the service during the month of April:

Gilbert D. Brown, Wenatchee, R-6
James E. Clark, Apalachicola, R-8
C. Eunice Skamser, Rocky Mountain Forest Experiment Station (disability)
James C. Whitham, R-1 (disability)

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Baron K. Waldbott, Budapest, Hungary, writes that the idea of creating a permanent International Forestry Organization which was approved at the International Congress for Silviculture held in Budapest in 1936 has finally been realized. In May 1939, he says, an International Centre of Silviculture was established with headquarters at 7 Roberstrasse, Berlin-Wannsee, Germany. This new agency, according to the announcement enclosed with his letter, is set up within the framework of the International Institute of Agriculture at Rome, but with its headquarters in Berlin. Its main functions or duties will be:

1. The promotion of the exchange of ideas between foresters in different countries by the arranging of international congresses of forestry and the setting up of a publishing system in accordance with the aims of the Centre.

2. Cooperation in the solution of such practical questions of forestry as concern various countries, or in particular countries call for conference on the basis of experience gained in other countries.

3. The carrying out of inquiries, statistical surveys and independent scientific work on the basis of the resolutions passed at the International Congress of Forestry or on the Centre's own initiative in such questions as are of importance from an international point of view.

Baron Waldbott, who is President of the new Centre, stated in his letter that he would like to have the Centre furnished regularly with forestry magazines published in the United States in exchange for "our own periodical, as soon as we shall publish it." The Washington Office has placed the Centre on the mailing list to receive official technical publications issued by the Forest Service and has referred his request to the "Journal of Forestry" and "American Forests."

"To our deep regret," Baron Waldbott says, "the war brought many difficulties in the collaboration between Nations; but for myself I believe that it is our duty and our mission to foster every action and to keep on every institution which aim is a peaceful and harmonious collaboration among States. One more centre of collective work and mutual interests may form a bridge to the reconciliation between Nations involved into conflicts."

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A new enrollment peak in 4-H Club work was reached in 1939 with more than 1,381,500 boys and girls belonging to some 79,500 4-H Clubs in the 48 States, Alaska, Hawaii, and Puerto Rico, Director M. L. Wilson of the Extension Service, U. S. Department of Agriculture, recently announced. This record membership represents an increase of more than 95,000 members over the preceding year.

RANGER FINDS EASY METHOD OF REMOVING SNOW

(From "Daily Sentinel," Grand Junction, Colorado)

Shoveling snow off the roofs of ranger cabins no longer is an arduous task for Ranger George Siewert of Cedaredge who has the Ward Lakes station in his territory.

He simply saws it off with a wire.

In a report to the local office of the U. S. Forest Service, Ranger Siewert explained he found it was no longer necessary to climb up on the buildings and shovel the snow to the ground. In his letter he wrote:

"I have found 150 feet of copper aerial wire (or any other wire handy) is all the equipment needed. For the simple type roof with the high ridge log the wire is laid along the apex of the roof with the ends hanging down, one on each end. One man holds each end and with a see-saw motion the wire cuts through the snow to the shingle roof and is then pulled underneath the snow to the eaves. The entire layer of snow is thus severed from the roof and slides off to the ground. When the snow is packed as it is in the spring -- there is about 60 inches -- it frequently happens that the jar of snow sliding off one side of the building will cause the other side to loosen and slide off of its own accord.

"By using the above method last week the snow from the three main buildings at Ward Lake was removed in about 15 minutes."

SERVICE BULLETIN

Contents Confidential

Vol. XXIV No. 10 Washington, D. C. May 13, 1940

NEWSPRINT FROM SOUTHERN GUM SEMICHEMICAL PULPS

By C. E. Curran, Forest Products Laboratory

Much interest has been indicated in the recent announcement by the Laboratory that a satisfactory newsprint paper had been produced using black or red gum semichemical pulp and southern yellow pine groundwood.

Standard newsprint is made in Canada and in the Northern States by combining unbleached coniferous sulfite pulp with spruce and balsam groundwood. The percentage of sulfite ranges from as low as 5 up to 30 percent. In the South the newsprint mill at Lufkin, Texas, is producing newsprint paper composed of about 22 percent semibleached pine sulfate and the balance yellow pine groundwood. The semibleached sulfate is a relatively high-priced pulp.

What the Laboratory has done is to make a very satisfactory newsprint using from 15 to 40 percent of either black or red gum semichemical pulp with the remainder from yellow pine groundwood. The properties of these papers are equal or better than average values for standard newsprint, as determined on some 28 commercial samples.

The advantage of such a process, if proved successful commercially, would be twofold. Some of the pine could be replaced by hardwood and the survey shows that 51 percent of southern timber stands are hardwoods -- immense quantities of which are black and red gum. The second advantage is the low cost of the semichemical pulp -- not materially higher than that of groundwood pulp.

An essential point in using semichemical pulp for this purpose is that it must be made from light-colored wood. Dark-colored species or wood containing much highly colored heart is not suitable. If a light-colored wood is used, however, the resulting pulps are bright enough in color to permit their use without bleaching, which it is desirable to avoid because of cost. Young growth gum, either black or red, can be found in quantity to meet this requirement.

The semichemical process was developed at the Laboratory about a dozen years ago. Its possibilities as a newsprint source were recognized at the outset, and publicized, but attempts made to produce newsprint from 100 percent semichemical pulp were not satisfactory -- the papers were too "tinny" and translucent. Groundwood is essential because it improves printability and opacity. No southern groundwood was available at that time and practical minds were dubious about its being commercially practicable. Commercial production of southern pine groundwood now appears well on the road to successful mill-scale operation. Hence we now have at hand the essential components and are gaining experience in their everyday production.

Yields by the semichemical process are as high as 75 percent. Black gum semichemical pulp of suitable quality for newsprint is and has been made for many years in the South. The Laboratory obtained such a pulp from the Carolina Fiber Company, of Hartsville, S. C., and made some of its newsprint runs from this material.

Hence, the way seems to be open to a cheaper and, it is to be hoped, a better newsprint from southern sources, utilizing both the pines and the hardwoods -- a desirable situation in management of southern forest stands. All the papers, thus far, are strictly Laboratory made. There may be, and undoubtedly will be, many hurdles to be jumped but results, thus far, encourage the belief that the project is one of hopeful prospect.

INFORMATION PLEASE!

By Philip McCandless and Milo A. Cooper, R.2

A current spasm of self-analysis in Region 2 has put the spotlight on certain question-provoking facts. Some of these facts and questions follow. We think we know some of the answers, and purpose working out solutions of the important problems involved. If, as seems plausible, similar questions have been raised in other Regions, a discussion of them will be welcomed, since the problems are difficult ones and we may need help in clarifying them and working out the best solution.

Fact - The Regional Office is geared to give and has been giving approximately ten and one-half man-years of on-the-Forest inspection annually to the twenty-one Forests in the Region. This averages one-half man-years per Forest and does not include the time of road location and other men giving actual service. About 55 percent of the inspection time falls in the four most important field months, June - September, inclusive.

Questions - Is the amount of inspection designed to meet the needs of the Supervisor or set up on some other basis? Is it more than he needs? Is there a tendency to usurp the Supervisor's responsibility for the supervision of his Forest?

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Fact - The average Supervisor and field-going staff have been in the company of Regional Office representatives approximately 13 percent of their available time during the year, and approximately 25 percent of their available time during the four most important field-season months, June - September, inclusive.

Questions - Has the Supervisor sufficient time between inspections to meet his administrative responsibilities? If not, should his staff be enlarged to take care of the pressure, or should the pressure be decreased?

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Fact - Thirty-two Regional Office men have been inspecting the various types of work for which the twenty-one Supervisors are responsible. More than twenty-one inspectors have visited a single Forest in a single year.

Questions - Is this degree of specialization necessary? If so, should we build up specialists on the Forests to deal with Regional Office specialists and eventually carry the same system down to the ranger districts? How many cooks does it take to spoil a broth?

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Fact - The amount of potential on-the-Forest inspection time from the Regional Office is divided as follows:

Engineering	37%
Operation	26%
Range Management	15%
Recreation and Lands	8%
Fiscal Control	8%
Timber Management	5%
Information & Education	1%

Questions - Has time a direct relationship to pressure? If so, is the pressure properly distributed among the various activities?

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Fact - During June - September, inclusive, 1938, the District Rangers in Region 2 spent approximately 50 percent of their time on Operation and Engineering activities and Supervisors were requested to encourage more Ranger's time and attention on resource management activities.

Questions - Did this time distribution by Rangers reflect the pressure from the Regional Office? If so, was the request reasonable in view of the fact that no adjustment of the Regional Office pressure was made?

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Fact - During 1939 there was but 38 percent compliance with the Regional Office monthly field schedules.

Questions - Does this degree of compliance build the Supervisor's confidence in Regional Office schedules? Can the Supervisors successfully coordinate their plans with those of inspectors when their experience indicates one chance in three of the inspectors complying with their plans? Considering past Regional Office pressure on the Supervisors to have their men schedule trips and comply with schedules, is the Regional Office's collective face red? (That's easy).

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Fact - The average ranger district work load during June - September, inclusive, is approximately three times as much as a single man can handle and the amount of additional help provided has been woefully inadequate.

Questions - Does this condition have some bearing on the high amount of overtime - thirty-one percent - that Region 2 Rangers worked during June - September, inclusive, 1939? In view of this fact, does it seem reasonable that the salaries and travel expenses in Region 2 are divided roughly as follows: Regional Office, $500,000; Forests, $700,000?

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Fact - A usual criticism by permittees, grazing permittees in particular, is that they do not have enough on-the-ground contact with the local administrator. A usual criticism by Rangers is that they do not have enough on-the-ground contact with their Supervisor. A usual criticism by Supervisors is that their supervision is hampered by excessive and poorly coordinated inspection.

Questions - Are these criticisms justified? If so, what adjustments in our organization are needed to remove the causes for them?

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Fact - A composite of all the facts listed above.

Questions - Is our organizational structure top-heavy? Are we drifting away from the decentralized type of organization to which we still give lipservice? If so, what adjustments are in order?

FIRE DAMAGE AND ESTHETIC VALUES

By H. T. Gisborne, NORTHERN ROCKY MTN. STA.

Proponents of the unassessibility of those "intangible" values destroyed by forest fires, such as streamflow, wildlife, and recreation, undoubtedly are convinced that even if partial ratings might be made of some of these damages there is one type that never will be touched. This is the group of conditions admitted to have esthetic value. While we may "never be able to put a dollar sign in front of a sunset", as Bob Marshall once stated, there is a school whose members believe that the esthetic difference between a Pittsburgh sunset and one seen on a June evening from a high peak in a wilderness area may some day be expressed in numerical terms.

Arthur D. Little, Inc., a concern profitably engaged in research for industries which put the dollar sign before everything, publishes in the March 1940 issue of its "Industrial Bulletin," the following item which clearly has a direct bearing on our problem of rating fire damage to esthetic values.

"The Mathematical Esthete!"

"Faraday once said: 'I do not perceive that a mathematical mind, simply as such, has any advantage over an equally acute mind not mathematical. . . . It could not of itself discover dynamical electricity nor electromagnetism, nor even magneto-electricity, or even suggest them.' Yet, a few decades later, the highly mathematical Maxwell actually brought about electromagnetic advancement by predictions, years before the phenomena were observed, that led Hertz, and later his pupil Marconi, to discover free 'ethereal' waves, and to found on them the radio industry.

"The penetrative light of mathematical analysis is being turned on seemingly unpromising subject matter with interesting result and even some stimulation of activity. The subject attacked was esthetics, which treats of our feelings and impressions, the reactions of our senses. The pioneer treatment was by Professor George D. Birkhoff, of Harvard University, in his book entitled "Aesthetic Measure," which sets forth a general formula for measuring the degree of satisfaction or enjoyment one should experience on looking at various shapes and designs, or on hearing particular poetry or music. Among artists, poets and musicians, there have always been those who had a keen instinctive understanding of the possibilities of their art and of how to bring out works of great beauty and satisfaction, and a few who could write about their feelings. The old Greeks gave much thought to line and figure and developed philosophies of beauty. Professor Birkhoff, while giving thought to the esthetic appraisal of music, perceived from the many writings of the past a general principle, stated it mathematically and then set about to test the formula to see that it had merit and reasonableness. The formula is simple and far-reaching, although still, perhaps, far from complete and from general acceptance.

"The fundamental thought developed is that the more one perceives for a given perceptive effort, the greater is the satisfaction that may be had. For sight, this implies that no matter how quickly it operates, the eye must scan anything it sees, in detail, somewhat as does the iconoscope of television, and that the more complex is the object, the greater is the effort or work required for its perception. Thus regular figures, with repetition of line and angle, are easier to take in or perceive than are irregular or skewed figures, and in a drawing a few important lines are more effective than much fussy detail. There are also, of course, degrees of content of interest among figures. The formula takes into account all of the above, and expresses the artist Hemsterhuis' rule that a 'beautiful form is that which gives us the greatest number of ideas in the shortest space of time.' It expresses, mathematically the application of efficiency to perception by our senses.

"The fundamental formula is/$m = o/c$, where m is the measure of satisfaction, o is the 'order' of interest, and c is the measure of the complexity that must be overcome in order to perceive the sight or sound. While at first this seems too simple and mechanical possibly to represent satisfaction, students of the subject claim that it wears well on acquaintance. Such criticism as has already appeared has been to add terms to the formula to include particular or habitual symbols of pleasure. In the book, simple plain figures are analyzed for their intrinsic interest, and a theory of design is worked out, based on the formula, and a method is given for designing beautiful vases. The principle is then applied to music, and melodies are analyzed for interest. The treatment appears to have application to anything seen, heard, or otherwise expressed, to all entities capable of spatial or numerical representation."

MORE REGARDING "ROVING RANGERS"

By E. E. Carter, Washington

The article "Roving Rangers or Transient Foresters" in the Bulletin of April 15 seemed to me to have a lot of truth and common sense in it. I was surprised and disappointed that only adverse "Comments" were appended by the Editor. Surely there are men of importance in the Service who realize that disturbance of the family hurts the morale of the breadwinner, and that there is a price to pay for the advantages (whatever they may be) of the constant shuffling of men from station to station. Apparently we are sensitive to the troubles of all families except those of our own group. We talk about "rehabilitation in place" for everyone except the Forest Officer. For him, the remedy or punishment for a slip is a move. "Three moves are as bad as a fire" is an old saying of farmers' wives.

There is another price to pay, too. Local silviculture makes it biggest strides where a man stays in one location long enough to see results, both of his good practice and of his mistakes. Some of the best practices in meeting specific problems of silviculture and of meeting local needs have been developed by men who have been on one Ranger District for years - Crisman on the George Washington with his fuelwood thinnings, for example. This form of loss to the Service is unavoidable when a man is needed for a higher position. If a man has to be moved because it seems to be the only effective way to shake him out of a rut there is probably little loss of this kind, because he was not thinking or at least not applying thought to his job. But the annual shuffle for other reasons does involve this loss, among others, and all the losses ought to be carefully weighed against the probable gains. Probably no one disputes that, as a generality. Have we done it? Especially, have we given proper weight to the very real human side portrayed for us by the writers of "Roving Rangers"?

PRAISE FOR THE SHELTERBELT

By Hon. Jed Johnson of Oklahoma, from Congressional Record of April 3

"The Forest Service has done a marvelous job with this shelterbelt program. . . . Not only is this work in itself of great value to the farmers and of general benefit to agriculture, but it has also been of great aid in meeting the unemployment problem in the farming areas. . . .

"Without disparaging in the least the great work which the Forest Service is doing in connection with the National Forests and private timberlands, in my opinion one of the most fertile fields for service in this country which lies before it is the application of its forestry science to the rehabilitation of the Great Plains region. . . .

"I am told that the first questions asked of our foresters when they visit Europe are about this project, which is internationally known. . . .

"Mr. Paul Roberts, of the Forest Service, has administered this program in the Plains States in a very high state of efficiency and economy. I am happy to report to this House that I have made a personal investigation of the work done by his Department in my district, and I have nothing but praise for the work of the Service from the farmers in my district. In every locality where these trees have been planted I find the farmers and townspeople in favor of continuance. . . ."

GIVE THE FOREMAN A CHANCE

(Reprint from the March 1940 number of the "Railway Mechanical Engineer.")

"The foreman, whether on a railroad or in industry, holds a key position, but unfortunately, while the truth of this is recognized more or less generally, practice in many places does not indicate that it has got very far beyond the theoretical stage. The foreman makes the direct contact with the men in the ranks and to them he is the representative of management. A poor foreman can be a continual friction point as he deals carelessly and unintelligently with the men under his direction. On the other hand, he can be a tower of strength and influence if he deals with them wisely and tactfully. . . .

"The foremen should be given that attention and appreciation which will qualify them to act intelligently and enthusiastically for the management, and as sympathetic interpreters of the men and management to each other. Friction means waste and costs money. It can be reduced to a minimum by a recognition of the importance and value of the foreman in the organization and by giving him a reasonable amount of attention. It pays to keep cutting tools sharp and in good order. It is just as important to see that the foreman is constantly on the alert and is enthusiastic about his job."

The above has application in the recognition of our own Forest Service foremen in CCC--the real "contact" men of the Service to all enrollees.-H. R. Kylie

REPRESENTATIVE FULMER SPEAKS ON FORESTRY PROBLEM

(Excerpts from an address by Honorable Hampton P. Fulmer to members of the D.A.R. at a luncheon at the Mayflower Hotel, Washington, D. C., April 15)

"I can assure you that it is a real pleasure for me to be with you on this occasion, and I feel highly honored in being invited to speak to you on what I believe to be one of the most important problems confronting us today. I refer to our national forestry problem.

"In 1938 the President of the United States sent a message to the Congress requesting that a committee be appointed to make a thorough investigation of our forestry resources, with the hope of ascertaining the real facts and for the purpose of having this committee make a report and recommendation to the Congress as to what should be done in building up and preserving our great forest resources. I happen to be vice chairman of this committee....

"We have had several hearings in the various sections of the United States, and I want to give you briefly, in part, a picture of the actual situation, as we found it in these various sections.

"We found in the State of New York that those in charge of forest conservation and the people generally were doing more, from a State and community standpoint, than any other State in the Union....

"We held a meeting at Madison, Wis., and the situation in the North Lake States -- Michigan, Minnesota, and Wisconsin -- is as follows: In an area half again as large as the New England States, a region of 57,000,000 acres, covering 86 counties, lies the so-called cut-over area of the North Lake States. There is a population in that area of about one and a half million people. In 1890 these States produced about 35 percent of the Nation's total of lumber and wood products. Thirty years later it was but 8 percent. Today it is 4 percent. Out of the 57,000,000 acres of timbered land at one time, we have in that section today about 3,000,000 acres of splendid forests, with millions of acres of cut-over lands. The ruthless destruction has caused many of the industries to close down and move out, or they have to supply their plants with imported pulpwood or secure same over long haul. Unemployment is very large. Millions of acres of this land today are tax delinquent, and many farmers are forced into tenant farming and on W. P. A. rolls, at the expense of the Federal Government.

"While at Madison we had the privilege of visiting the forest laboratories, which was most interesting. We found that those in charge were doing a wonderful work, stacking away numerous volumes of statistics, facts, but the serious trouble in connection with this line of work, which is very important, is that these facts or findings are not getting out to the people, and, if so, only in a limited way to large, well-organized groups....

"We had the privilege of holding a meeting in California and at Portland, Oregon. We drove many miles through beautiful scenery in both of these States. One of the most impressive sights that I have ever seen was when we drove through the California redwood section. These redwood trees are the oldest living things in the country today.... I find, however, that most of the area where these trees are located is in the possession of perhaps about seven large individual owners or corporation owners. Many of them are carrying out fairly good forestry practices. When these trees will have eventually been destroyed because of the failure on our part to bring about proper forestry practices, it will be the last of the oldest living things in any part of the world. What an opportunity to preserve these for untold future generations.

"In driving through Oregon I had the privilege of seeing the beautiful Douglas-fir trees. However, on all of this trip we saw thousands of acres of land where the forests had been ruthlessly destroyed....

"While in Oregon it was called to my attention that one of the local county papers had to add 52 pages for the purpose of advertising tax-delinquent lands. These lands did not belong to any of the large operators or non-resident owners. This land belonged to individuals.

"When a great amount of land in any county becomes tax delinquent, the next step on the part of the county government is to increase the taxes of those who are still holding on to their lands. This eventually means that additional land will become tax delinquent, and the next move on the part of these people is to place these lands in the possession of the Forest Service or Federal Government, and, because of the lack of revenue, they are now coming to the Federal Government, requesting an increase in payment by the Forest Service to these counties to be used in helping to defray the expenses of the county government.

"Let's take a look at the South. I can remember, as a boy, my father clearing up new land, the cutting of beautiful, longleaf pine trees, and what a time we had burning these logs for the purpose, as stated, of clearing up farm lands. Today, in the South, we can find very little virgin longleaf pine timber. However, we have in the Southern States, perhaps, the second best timber supply to that of the North Pacific Coast, largely composed of second growth, most of which at this time is pulpwood size. During the last 3, 4, or 5 years, we have had some forty-odd pulp-and-paper mills moving into the South. Many of them have moved there because of the possibility of securing plenty of pulpwood. They have either moved out of sections where all of the pulpwood has been destroyed; or they have refused to move into other sections because they knew they could not get a supply of pulpwood; and I want to state that it is pitiful to observe the ruthless destruction of one of the greatest resources that we have, under the operations of these pulp-and-paper mills, as well as under the operations of many sawmills in the South.

"It is my belief that the years will not be many before this wonderful and important resource, which, if properly preserved, would mean employment and tremendous income to millions of our people, will be a thing of the past -- will be a picture just like the one I painted for you in the North Lake States.

"I could take many individual States and paint to you a sad picture -- Mississippi, Missouri, etc.....

"Today we are spending millions to build up our defense in the way of building battleships, airplanes, etc.; but, to my way of thinking, if we would spend more time and money in building up and preserving our resources -- our forest resources, if you please -- we would be doing more toward building up our defense and placing our people in the attitude of defending our great Republic than anything that we could do."

GOING UP

In 1937, Mr. Silcox asked when timber sale receipts would again reach the $4,000,000 mark of Fiscal Years 1929 and 1930. This looks like the year. The statement of receipts dated March 31, shows an increase in sales receipts of $928,000 for the three quarters of the F.Y. 1940 compared with the same period of the F.Y. 1939. That increase is enough to give hope that the end of the year will see the 1929 receipts equaled. A factor in that hope is that cash receipts do not exceed value reported cut in sales for the nine months. There has been no increase in the total of advance deposits.

If we turn to value of timber cut in both sales and exchange cuttings as having more real significance than sales receipts, F.Y. 1940 is already ahead of 1929 or 1930.

Value cut, three quarters Fiscal Year

	Sales	Exchanges	Total
1929	$2,840,049	$270,174	$3,110,223
1930	3,269,043	315,519	3,584,562
1940	2,878,238	730,983	3,609,221

It should be noted that the value cut in exchanges in 1940 is almost exactly double the corresponding figure for 1930.

It looks as if the Depression were over in National Forest timber business. At least we are back where we were ten years ago, after a fairly steady climb from the nadir of 1933-1934.-E. E. Carter

CCC RECORDS IN DIVISION OF STATE AND PRIVATE FORESTRY REGION 8

By Elizabeth Mason, R.8

"When will Camp P-98 be ready to move and where should it be relocated?" This is a typical question which might be asked at any time in the Division of State and Private Forestry and, undoubtedly, will be asked many times when recommendations and priority lists for CCC camps are requested. To be able to answer such questions accurately and intelligently, the following records have been set up and kept up to date at all times:

An informal notebook record is available which shows how many months a camp may remain at its present location; also proposed new locations for camps. This record is very brief and is meant only for quick reference. The work loads as shown in this notebook are picked up from long-time work plans, reports and memoranda by Regional inspectors, and Forms E submitted by the State Foresters at the time camp recommendations are requested from the States.

Long-time work plans are on file in the Division for each S and P camp in the Region; also proposed new locations. These plans are prepared in the field, usually by the Clarke-McNary Section 2 inspectors in collaboration with the State Foresters, and show all work which is proposed during the entire life of a camp. When the inspectors return to the office, the plans are typed and filed in the Division where they are available at all times.

The long-time plans are supplemented by long-time maps which are also on file in the Division, and show improvements completed by the camps, projects for the current work period, and proposed projects which are listed on the above-mentioned long-time plans. These maps are mailed to the States at the beginning of each work period to be brought up to date. They are used in the Division to check 6-month work programs before the projects are passed to the CCC Division for final approval or disapproval. Supplemental project requests submitted all along during a work period are checked on the maps in the same manner as the 6-month programs.

An informal record is kept in the Division which shows at all times the total man-days approved for each main and side camp during a current work period. The purpose of this record is to prevent approval of more than one period's work at any one camp during any one period.

There is also on file in the Division a map of each State in Region 8, which shows locations of all S and P CCC camps (both abandoned and present) since the beginning of CCC. These maps are posted currently as camps are occupied and closed. A list attached to each map shows the date each camp was established and abandoned.

A record is also kept on all nursery operation and development projects accomplished by the CCC camps. This information is valuable in connection with the development of cooperative Clarke-McNary Section 4 nurseries.

Since it is the responsibility of the Division of State and Private Forestry to decide where and when S and P CCC camps are to be established and abandoned, and whether projects requested by the State Foresters are justified from a fire protection and recreational standpoint, the above records have been set up to assist in the proper performance of this responsibility.

THE EDITOR DISCOVERS

Mr. Frank Heyward, Jr., General Manager of the Southern Pulpwood Conservation Association, writes that, as a means of further educating both pulpwood producers and landowners, members of the Association have adopted the use of seed tree tags inscribed as follows:

SEED TREE

Left to Reforest this Land
for Future Income

PLEASE DO NOT CUT

Southern Pulpwood Conservation Ass'n.

The tags will be used with the hope that this practice will discourage the cutting of these trees by the landowner himself or by other wood-using industries. As an experiment, 800,000 of these tags will be used, and it is hoped their use will become a permanent activity of the members of the Association. "The use of these tags followed by our rapidly expanding program of marking and selective cutting will, I believe, prove to be one of the most educational activities ever undertaken in the South," says Mr. Heyward.

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The Department has advised the Forest Service that the objections originally raised by Members of Congress to the term "Shelterbelt" have just about disappeared and that this shorter term may now be used when referring to the Prairie States Forestry Project.

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"Make Ready for the Future," a message from Alaska's new Governor, Ernest Gruening, is one of the leading articles in the March 31 "Progress and Development Edition" of the "Daily Alaska Empire" of Juneau. For a greater Alaska the Governor proposes: Construction of suitable airports; increased shipping facilities; more roads and highways; employment of Alaska residents on public projects and in private industries in Alaska; and development of recreational facilities, including simple cabins and camps along lakes and streams.

The edition includes the following signed articles by members of the Forest Service:

"Alaska Peat Development is Forecast," by J. M. Wyckoff.

"Glaciers at Juneau," by B. Frank Heintzleman.

"Government Comes to Rescue of Vanishing Totems," by Linn A. Forest.

"Wood-Using Industries Encouraged," by Charles H. Forward.

"Sixty-five Miles of Foot Trails at Juneau's Front Door," "Homesites in Alaska," and "Fine Summer Homes Flank Juneau's Glacier Highway," by William N. Parke.

"Trout Abound in Southeast Alaska Waters," by Harry Sperling.

"Forest Service Interested in Game; Managed as an Alaska Tourist Attraction," by Oliver Edwards.

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According to the report of the State Director of Public Works, just released, the damages caused by the storm and floods of February-March 1940 in northern California fall into five general classifications as follows:

1. Damages to properties and works of the Federal Government, in an estimated amount of $631,000.

2. Damages to properties of the State of California, in an estimated amount of $1,721,500.

3. Damages to properties of counties, cities and public districts, in an estimated amount of $2,344,000.

4. Damages to properties of privately owned public utilities, in an estimated amount of $822,300.

5. Damages to private property and private losses, other than those classified under item 4, in an estimated amount of $6,522,800.

The damage to truck and horse trails, bridges, telephone lines, recreation and camp grounds, buildings, private roads and improvements on the National Forests is estimated to be $442,000. (This is included in item 1)

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The following resolution was adopted at the Forty-ninth Continental Congress of the Daughters of American Revolution, held in Washington, D. C., April 15-19:

"That the members of the National Society, Daughters of the American Revolution, express to the United States Forestry Service appreciation of the opportunity given the Society to make the planting of penny pines in memorial forests a Golden Jubilee Project and for the practical assistance rendered in carrying out this conservation program."

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The American Forestry Association will conduct the following "Trail Rider" trips this summer:

Expedition No. 1 - Great Smoky Mountains, North Carolina, June 17-25
Expedition No. 2 - Sawtooth Wilderness, Sawtooth National Forest, Idaho, July 15-28
Expedition No. 3 - Spanish Peaks-Hilgard Wilderness, Gallatin National Forest, Montana, July 18-30
Expedition No. 4 - Wind River Wilderness, Wyoming, July 18-31
Expedition No. 5 - Gila Wilderness, Gila National Forest, New Mexico, July 29 to August 10
Expedition No. 6 - Maroon-Snowmass Wilderness, Holy Cross National Forest, Colorado, August 2-15
Expedition No. 7 - White River Flat Tops Wilderness, White River National Forest, Colorado, August 20 to September 2
Expedition No. 8 - Kings River Wilderness, California, August 23 to September 4.

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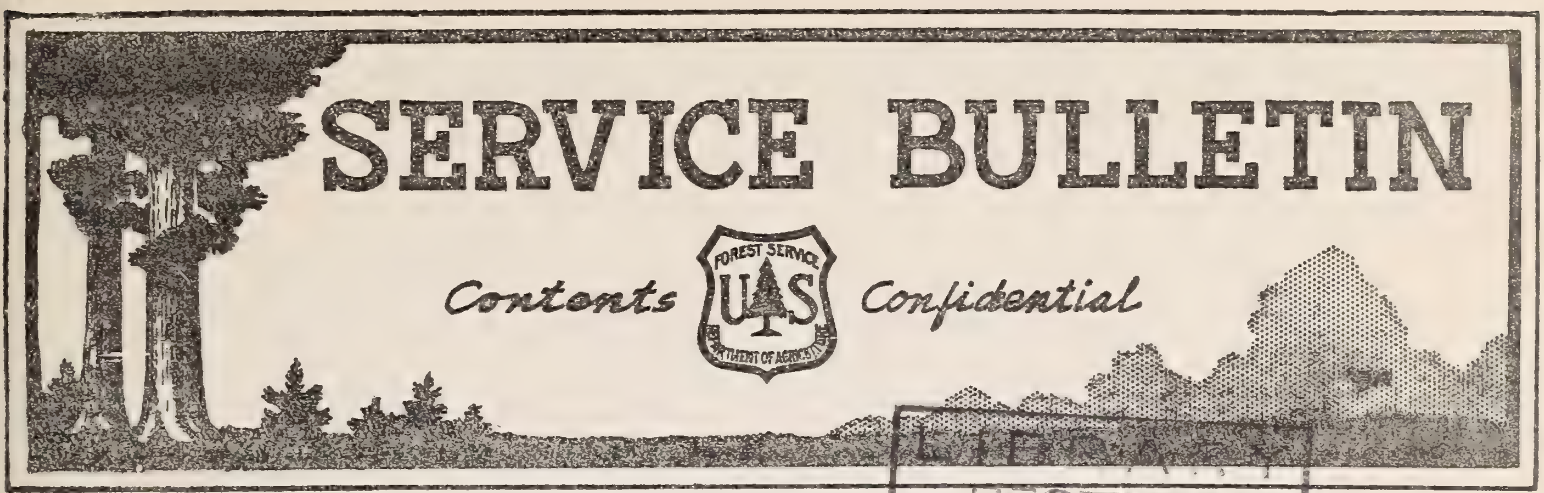
Because of numerous inquiries regarding the purchase of Stetson Hats received by them from Forest Officers, the Fechheimer Company has asked the Washington Office if the Forest Service still has an agreement whereby these hats may be purchased from the Stetson Company. If not, they say, "then we would of course want to again stock them." For the information of Forest Officers who may not already know it - the Forest Service still has an arrangement with the Stetson Company for securing hats for its regular personnel. Each Regional Office is acquainted with the procedure.



SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 11 Washington, D. C. May 27, 1940

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THE BAKED APPLE CLUB MEETS AGAIN!

By W. W. Bergoffen, Bienville

"Has there any old fellow got mixed with the boys?
If there has, take him out, without making a noise,
Hang the Almanac's cheat and the Catalogue's spite!
Old Time is a liar! We're twenty tonight!"

These words by Oliver Wendell Holmes must be inscribed in at least one of the many books which line the spacious library in the home of Gifford Pinchot. Their meaning became vibrantly clear on the night of May 2, 1940. For, in the warm glow of Gifford Pinchot's cordial hospitality and with the smell of gingerbread and baked apples in their nostrils, "The Boys" met again in the home of their "Chief" --- in the same room where many a meeting of the Society of American Foresters was held in the early days of the Forest Service. It soon became evident that the intervening thirty-odd years had wrought but few changes in the spirit and enthusiasm of the Old Guard --- those men who first shouldered the wheel with "G.P." and, for the most part, are still doing a full share for the cause of American forestry. What matter if there were 150 at this meeting of the "Baked Apple Club" as against less than a score in earlier days? The "newcomers" were living evidence of the advance of forestry within the same century. Here were "younger bloods" to gain wisdom from the words of pioneer foresters; to share in the enthusiasm which has characterized the work of the Old Guard through the years; to become inspired with the splendid knowledge that the esprit de corps of the forestry profession is a glorious torch, self-replenishing and inextinguishable.

Gifford Pinchot was introduced as presiding officer by Chairman Alfred E. Fivaz of the Washington Section, Society of American Foresters, under whose sponsorship the meeting was called. The former Chief Forester recalled the early work of the Forest Service and likened what appear to be modern trials and tribulations to those difficulties which confronted the first foresters and which they hardily overcame. Then he called upon several long-time members of the Section.

Leon Kneipp: "....... It was my first timber sale. I was having a devil of a time trying to make the operator cut stumps low and pile slash. Then, one day, I had a chance to prove I could talk the lumberjacks' language. That timber sale was very successful. I was promoted from $60 to $90 per month soon thereafter...."

Chris Rachford: ".... 'Do you want a salary or a career?' I was asked when I applied for my first job with the government. I had been a cowboy. But then I went into the sheep business and I lost my cowboy friends and all my money. So, 'I want a career,' I said. I got the job.... The greatest satisfaction I have is that I have seen multiple-use in practice on our National Forests...."

Herbert Smith: ".... In 1889, when Pinchot graduated from Yale, he was asked what work he was going into. He astounded everyone when he said 'forestry.' It was difficult to believe. This young man, who could have had anything he desired.... (he was the outstanding man of his class).... chose forestry as a career.... Twenty years later, at the Yale Reunion of 1909, Gifford Pinchot's name was on everyone's lips. He had become a nationally-known leader through the rise of the conservation issues out of forestry.... "

Arthur Ringland: ".... Congress had passed the act prohibiting the creation of National Forests in several Western States by executive order. Only 10 days remained in which President Roosevelt could still pass on the tracts already under consideration. The lands had been examined and were ready for executive approval by the President for creation into National Forests. I brought the maps to Michigan State College in Lansing where Gifford Pinchot was to receive an honorary degree. I can see him now.... Crawling on his hands and knees over the maps on the floor of his room, writing his O.K. on them.... "

John Hatton: ".... I expected $1000 the first year but took the $300 and swallowed my pride.... I was almost born a tree planter and thirty-five years ago I helped to investigate the possibility of planting trees in the Plains States resulting in what is now the Nebraska National Forest. You can understand how gratified I am to see the expansion of this work today as exemplified by the great plains shelterbelt project. In spite of all the hardships and all the discouragements of those pioneer years.... I haven't any regrets at all for having given all of the best years of my life to this thing we have called forestry and American conservation."

Gifford Pinchot brought to life the visit of the President of the United States to a meeting of the Section when the Society of American Foresters was in its infancy. On that memorable occasion, in that same library, Theodore Roosevelt addressed the original group of earnest "youngsters" in this fashion:

FORESTRY AND FORESTERS

(Address delivered by Theodore Roosevelt before the
Society of American Foresters, March 26, 1903, at
1615 Rhode Island Avenue, Washington, D. C.)

"I have felt that the meeting this evening was of such a character as not merely to warrant but to require that I should break through my custom of not going out to make speeches of this sort, for I believe that there is no body of men who have it in their power today to do a greater service to the country than those engaged in the scientific study of, and practical application of, approved methods of forestry for the preservation of the woods of the United States....

"And now, first and foremost, you can never afford to forget for one moment what is the object of our forest policy. That object is not to preserve the forests because they are beautiful, though that is good in itself, nor because they are refuges for the wild creatures of the wilderness, though that, too, is good in itself; but the primary object of our forest policy, as of the land policy of the United States, is the making of prosperous homes. It is part of the traditional policy of home making of our country. Every other consideration comes as secondary. The whole effort of the Government in dealing with the forests must be directed to this end, keeping in view the fact that it is not only necessary to start the homes as prosperous, but to keep them so. That is why the forests have got to be kept. You can start a prosperous home by destroying the forests, but you cannot keep it prosperous that way.

"And you are going to be able to make that policy permanently the policy of the country only in so far as you are able to make the people at large, and, above all, the people concretely interested in the results in the different localities, appreciative of what it means. Impress upon them the full recognition of the value of its policy, and make them earnest and zealous adherents of it. Keep in mind the fact that in a government such as ours it is out of the question to impose a policy like this from without....

"That is the only way in which this policy can be made a permanent success. You must convince the people of the truth -- and it is the truth -- that the success of home makers depends in the long run upon the wisdom with which the nation takes care of its forests. That seems a strong statement, but it is none too strong.

".... Your attention must be directed to the preservation of the forests, not as an end in itself, but as a means of preserving and increasing the prosperity of the nation. 'Forestry is the preservation of forests by wise use,' to quote a phrase I used in my first message to Congress....

"The forest problem is in many ways the most vital internal problem in the United States. The more closely this statement is examined the more evident its truth becomes....

"You have created a new profession of the highest importance, of the highest usefulness to the State, and you are in honor bound to yourselves and the people to make that profession stand as high as any other profession, however intimately connected with our highest and finest development as a nation. You are engaged in pioneer work in a calling whose opportunities for public service are very great. Treat that calling seriously; remember how much it means to the country as a whole.

"The profession you have adopted is one which touches the Republic on almost every side -- political, social, industrial, commercial; to rise to its level you will need a wide acquaintance with the general life of the nation, and a viewpoint both broad and high.

"Any profession which makes you deal with your fellowmen at large makes it necessary that if you are to succeed you should understand what those fellow-men are, and not merely what they are thought to be by people who live in the closet or the parlor....

"I believe that the foresters of the United States will create a more effective system of forestry than we have yet seen. If not, gentlemen, if you do not, I shall feel that you have fallen behind your brethern in other callings, and I do not believe that you will fall behind them....

"....the members of this society have an unexampled field before them.... You have made a good beginning, and I congratulate you upon it....

"....You must instill your own ideals into the mass of your fellowmen and at the same time show your ability to work with them in practical and business fashion. This is the condition precedent to your being of use to the body politic."

MAJOR CHANGES IN THE PRESENT RETIREMENT LAW PROPOSED BY H. R. 9424

By H. I. Loving, Washington

SECTION I--ELIGIBILITY FOR SUPERANNUATION RETIREMENT

Present Law	H. R. 9424
Provides for automatic retirement at age 70, 65, and 62 after 15 years' service.	Provides for automatic retirement at age 70 and 65 after 15 years' service. The present 62-year class is combined with the 65-year class.
Permits optional retirement at ages 68, 63, and 60 after 30 years' service, at employee's option.	Permits optional retirement at age 60 after 30 years of service or at age 62 after 15 years' service, at either employee's or Government's option. Government's option contingent upon disqualification of employee for performance of efficient work.
	Permits retirement at employee's option at age 55 after 30 years' service on basis of present worth of deferred annuity at age 60.

SECTION II--AUTOMATIC SEPARATION

	Authorizes reemployment, by Executive Order, of persons already retired.

SECTION VII--INVOLUNTARY SEPARATION FROM THE SERVICE

Present Law	H. R. 9424
Employees 55 years of age or over with 15 years' service may, upon becoming involuntarily separated from service, elect to receive:	Employees with 5 years of service, separated either by voluntary action of the employee or by removal for cause involving delinquency or misconduct, before becoming eligible for retirement, may elect:
(a) Total amount of deductions with interest.	
(b) An immediate life annuity on reduced basis.	(1) To be paid a life annuity at age 65, computed as provided in section 4(a) of the Act, or
(c) A deferred life annuity beginning at age at which regular retirement would have been effective.	(2) To be paid the amount credited to his individual account with accumulated interest, plus a life annuity beginning at age 65 in the amount of $30 for each year of service not exceeding 14+.
Employees 45 years of age or over with 15 years' service upon becoming involuntarily separated from service are entitled to a deferred annuity, and on reaching age of 55 may elect to receive an immediate life annuity on reduced basis.	Employees involuntarily separated, not by removal for cause on charges of misconduct or delinquency, after 5 years of service but before eligible for retirement may elect:

(1) An annuity beginning at 65, computed as provided in Section 4 of the retirement Act.

(2) An immediate life annuity beginning at 55 or any age subsequent thereto as the employee may elect, such annuity to have a value equal to the present worth of a deferred annuity at 65, or

(3) The total amount of his deductions with interest thereon, plus an annuity beginning at 65, computed as provided in Section 4, which annuity shall be reduced by the amount of annuity purchasable with the amount refunded to the employee.

Interest at 3%, compounded annually, to be allowed on amount credited to the individual's account, from date of employee's separation to beginning date of his annuity.

SECTION IX--CREDIT FOR PAST SERVICE

Present Law	H. R. 9424
Credit for past service to be purchased at 2½% of basic pay for period July 31, 1920, to June 30, 1926, and 3½% after July 1, 1926.	Provides for purchases of service credit after July 1, 1940, at 4½%.

SECTION X--DEDUCTIONS AND DONATIONS

Present Law	H. R. 9424
Deductions of 3½% of basic salary.	Increases deductions after July 1, 1940, to 4½%.
Provides that amount resulting from deposits in multiples of $25 shall be available to purchase additional annuity, at the date of retirement.	Provides that amount resulting from additional deposits in multiples of $25 shall be available, not at date of retirement, but rather upon beginning of an annuity under the regular provisions of the Act.

SECTION XII--RETURN OF AMOUNTS DEDUCTED FROM SALARIES

Present Law	H. R. 9424
Provides for return of amount credited to individual accounts of employees transferred to positions outside scope of retirement act or absolutely separated from service. If separation is involuntary, not for cause or charges of misconduct or delinquency, return shall be made of entire amount of deductions (credit to	Provides for return of amount credited to individual account of employees absolutely separated from service before completion of 5 years' service. If separation is involuntary before 5 years of service, or if employee is transferred to position outside scope of retirement act, regardless of length of service,

individual account and tontine deductions). In case of reentry in position subject to retirement act, refunds plus interest must be redeposited.	refund shall be total amount of deductions (credit to individual account and tontine deductions). In event of reentry in position subject to retirement act, refunds plus interest must be redeposited. Sets up procedure for refund of amounts resulting from additional $25 deposits.
GENERAL	
	Provides that amendments shall not retroactively affect employees separated prior to effective date of the amendments.
	Provisions of H. R. 9424 to be effective as of July 1, 1940.

Although there is only a remote chance that this Bill will become law this session of Congress, it probably has a good chance of passage before long.

WHAT OF THE HURRICANE ON THE WHITE MOUNTAIN?

By C. L. Graham, White Mountain

Occasionally we receive inquiries as to what has happened to the timber on the White Mountain National Forest in New Hampshire as a result of the Big Blow. On that fateful day in September 1938 when a West Indian hurricane, far off the usual course, came howling through New England, its path of greatest intensity sliced across the western half of the White Mountain Forest smacking down stands of spruce and hardwoods with tremendous force. It funneled with added pressure through the notches and laid low many a promising stand on the higher slopes.

After the State Highway and Forest forces had swamped out some of the roads so we could look around, it was apparent the Forest had taken a heavy beating. How much was involved and where needed investigation. It was quite a while before a fairly accurate estimate of what had happened could be obtained. Fortunately, we had good type maps and stand tables. Sketching from high points, roads, or other points of vantage was necessary to spot areas of blow down, and sample examinations had to be made to determine percentages of loss in such areas.

Meanwhile it was known that certain operable stands of high quality timber had taken a considerable wallop and something should be started at once toward salvage. It was determined early in the game that, to the extent possible, salvage would be accomplished through regular sales procedure, and that no sacrificing of stumpage prices in order to dump distressed material on an already jittery market would be made. The old line operators rallied round and indicated willingness to stretch themselves to absorb what they could. Many of them borrowed money and all planned to increase inventories. And so we went to work.

At the same time there was the job of cleaning up the fire hazard along roads and trails, using CCC, WPA, and a special emergency appropriation of a half million dollars for the purpose. That's another story, however.

Some extra men were made available for the job of estimating and appraisal. The survey of damaged areas showed that about 200 million feet of merchantable trees had been blown down. Of this the bulk was in individual trees or groups too scattered to be practicably operated or too inaccessible to reach without heavy and expensive road construction. About 80 million feet were in operable chances within which 60 percent to 100 percent of the volume was blown flat and much of the rest badly loosened in the ground.

We cut procedure to the bone. Operations that were going at the time of the hurricane but which were relatively undamaged were suspended indefinitely with the purchaser's consent and his activities transferred to damaged chances he bid in. Fortunately, most operations delivered logs to established plants outside the Forest and the moving of mills was not appreciably involved. Many sales were made using the administrative use procedure, but if there was any chance for competition (and there was in all except a few small cases) even these sales were advertised. Operating costs in damaged stands were difficult to appraise but they were worked out.

Merchantable material worked up by hazard reduction crews was advertised and sold at roadside or trailside to the highest bidder. An arbitrary but fair stumpage value for this material was assigned and the amount covered into the forest reserve fund. The rest went into the Treasury as sales of surplus property.

Up to May 1940, the Forest had over 60 million feet of the 80 million in operable chances sold and about 30 million feet cut. This is going out in the form of sawlogs, pulpwood, and fuelwood. In approximate terms, the job of selling our salvageable material is three-fourths complete and the job of cutting it more than one-third. This in the face of markets overburdened with wind-blown timber. We figure we have another year or better to get out the hardwoods before deterioration is serious and at least three more seasons for the spruce. The cut to date has been about half and half. Given a reasonably stable market we expect to salvage the whole 80 million and perhaps a little more.

FORESTRY IN THE AAA PROGRAM

By Lyall E. Peterson, Washington

In their zeal for the cause of forest conservation many foresters are displaying a growing interest in the Agricultural Conservation Program, because the small part of it that is directed at forest conservation still represents the largest single farm forestry program now in operation. In 1938 the AAA paid out $809,575 for forest and range conservation practices, of which nearly 75 percent went for tree planting, and maintenance of plantations. The total expenditure was probably higher in 1939, and will no doubt be even greater in 1940. Still there is complaint. It is argued that the proper place of forestry in the Triple A program has not been established - that the emphasis now being given to certain practices is not in line with the relative need for such practices as planting, woodland improvement, maintenance, protection, etc. - and that the public is not getting a fair return on the AAA expenditure in terms of forest conservation. Two obvious approaches in trying to solve such a problem are: (1) to talk about it until something is done; (2) to go directly to the source of the trouble and get something done.

In Ross County, Ohio, representatives of public agencies have gotten together and have taken the latter approach. The procedure being used is best described by quoting from a recent letter sent to the Washington Office by J. Alfred Hall, Director of the Central States Forest Experiment Station:

"Last fall, when the 1940 ACP tree-planting program was under discussion by the Ross County Committee, this committee, made up of rather hard-headed men and under the leadership of one man in particular who came from the hill part of the county, came forward with the idea that what they really needed in Ross County was not trees for planting and planting payments, but encouragement in management of the stands of trees that they already have. Since this was a new idea in ACP, the Extension Division at the University took it up and, in cooperation with the County Committee, proceeded to develop it.

"The next step was for the Ross County committee to put into tentative form their initial recommendations of what they thought ought to be covered by ACP payments. Then an inter-agency committee consisting of the State BAE representative, representatives of the Soil Conservation Service, the State Division of Forestry, Extension Service, Wayne National Forest, and this Station got together and revised the Ross County suggestions, drawing up a simple plan of management practices that were taken to Washington by the Extension Division, and recommended to AAA. In this plan, planting occupies a distinctly secondary position.

"One of the important elements that came out of these preliminary discussions was the desire of the Ross County committee for a short educational period in which the ACP township committeemen could be trained in the simple forest practices to be recommended. It could then form a nucleus of instructors for cooperators under the plan, and real progress could be obtained. We scheduled a four day meeting starting at Chillicothe on March 26.... After the first day had been spent in outlining objectives and getting acquainted with the personnel and general aspects of the problem, we went out for three days of examination in the field. All sorts of conditions were examined on the ground and discussed.

"Although there was a tendency on the part of some agencies to play up stand improvement practices in demonstration areas that had already been installed, most good came from examination of stands that had not been touched. As a matter of fact, these farmers with whom we were dealing soon got an excellent idea of what stand improvement, simplified, should consist of, and were firmly of the opinion that some of the stuff parading as stand improvement was so far beyond the practical means of accomplishment by the ordinary farmer as to be ridiculous.

"Our principal aim in all discussion was to get the farmer to look at his woods with the same critical eye that he uses in regarding his crop land. Most of them have not been trained to regard woodland as anything from which a possible profit could be derived. I believe we made considerable progress along this line, although there was a considerable amount of skepticism as to the potential returns.

"Of over-all importance, of course, is the market for fuelwood. There is no question that the outlet for fuelwood is the bottleneck through which a great amount of stand improvement work will have to be fed. Another very important consideration is the very great necessity for a sort of hardwood forestry primer, illustrated, which we can use with these farmers. We are dealing here with 75 community leaders, each of whom is in frequent contact with from 50 to 100 other farmers, and each of whom will serve as a nucleus for education in farm forestry. Such a vehicle as the primer mentioned will be a valuable tool in getting forestry into the consciousness of these men and maintaining it there. The Station has undertaken the job of preparing such a primer, probably for a joint publication with the Extension Service.

"The net result of the March meeting seems to have been very well worth while as a preliminary, but we are still far from our objective. Since there will be no opportunity for woods work until next winter, our farmers are very urgent in their desire for another educational meeting in December in which we can go into actual demonstration of operations in the field on a few selected areas a little bit more intensively.

"I think this is undoubtedly worth while in view of the experimental nature of the Ross County development. Incidentally, the Station personnel derives a great deal of benefit from actually getting out on the ground with men who are going to do the work, and studying problems at first hand and the ground level."

One important angle not covered above was the simple and clear style used by the Forest Service men in the written material handed out to farmers at the training conference. This is important. Witness, for example, the concluding paragraph from Hall's paper "What is Forest Management":

"That's where forestry is a lot like farming. Farming is scientific, yes, but it is also an art. Men who know and feel soil and plants are better farmers than men who know all the books about farming ever written. Same with trees -- men learn to know how they behave and the kind of treatment they like. Forestry is still very much an art, but most of our farmers don't know trees like they know field crops. When they do, they will manage their forests as carefully as they do their fields."

One final point. The training school idea is recommended not as a means of developing sentiment for new practices or additional payments but as an elementary approach to the task of informing farmers about the forestry practices in their AAA bulletin in order that they can choose between various soil-building practices intelligently. If this can be accomplished most of the fears that forestry in the ACP is being slighted will be dispelled.

MORE ON "ROVING RANGERS - OR TRANSIENT FORESTERS"

By Roy Headley, Washington

The comments regarding the Nash-Boulden and Brown article on this subject in the April 15 issue of the Service Bulletin, exhibit one common characteristic. With one possible minor exception, none of the commentators indicate that they are aware there is any sacrifice to public and Forest Service interests when a man is moved.

The commentators must know that the matter is not as one-sided as their comments suggest, but, by omitting reference to the official disadvantages of transfers, they reinforce the notion that it has come to seem more important to policy makers to have a well-traveled personnel than it is to have what comes from stability of assignments.

Here is a recent experience of mine. A well-known editor-philosopher gave me a half day in which to pump him on fire control and related subjects. His home is in a small town, a District Ranger headquarters. He is well-read, a keen observer, and an influential supporter of conservation. He knows forest fires, people, and politics.

When I asked him what to do concretely about fire prevention, his number one answer was - "Leave men longer in one place." Nothing had previously brought up the point. He had been in an excellent position to observe the effect on fire prevention from the roving ranger practice and was merely giving me his mature conclusion.

Repeatedly I come across men who have so established themselves and so learned their people that they are just about ready to step out with real leadership in fire prevention - and the next thing I learn is that they have been moved.

Sometimes I come across a man who is a powerful force in his community or State for fire prevention and conservation in general. Offhand, I cannot remember a single instance of this kind where the Ranger or Supervisor falls in this roving class. Try as he may, how can any man learn in two or three years all the elusive things he must know in order to exert a worth-while influence on the minds and actions of his community or State?

Two years ago I visited a District Ranger who amazed me by his insight into a tough fire prevention situation. He was about ready to lead out - but was also about to be moved. Recently I visited his successor, an equally hard working and able man. My final unspoken conclusion was - "This man is by now almost up to where his predecessor was two years ago in insight and readiness to lead out".

Now maybe fire prevention is different. It means working with people and ideas. Both are often hard to understand. Neither can be learned adequately in a three-year stop between the last assignment and the next one. But are there no people and ideas involved in other activities?

Lest I prove as one-sided as the commentators on the Nash-Boulden-Brown barbs, let me say:

Sure, there are good reasons for transfers. There are promotions, provincialism, bad states of mind, personal clashes, new units to be organized, men to be trained and broadened, bad family or other situations to be broken up, and so on - all good and often imperative reasons for transfers. And no comfortable rules can be laid down for deciding for or against a transfer. Most cases need to be decided by careful weighing of all reasons for and against individual transfers or programs for systematically shoving men around for their own good and to meet the future needs of the Service for men of wide experience.

In effect, Boulden and Brown ask - "In transferring men, is due consideration given to the effect on home life and the happiness of the human beings involved?" I add, - "Is due consideration given to possible bad effects on the work or on the man himself, from a proposed transfer?"

If the comments may be interpreted as meaning - "No, we haven't given much weight to these reasons against transfers" - then with Boulden and Brown I hope that the comments also mean - "But we ought to." A little more evidence that the bad effects from transfers are weighed as carefully as the good effects would probably be reassuring to Nash-Boulden, Brown and a lotta wives.

THE EDITOR DISCOVERS

The Secretary of Agriculture has formally approved a recommendation of the Department Committee on Plant Names, endorsed by the Chiefs of the Bureau of Plant Industry, Forest Service, and Soil Conservation Service to put the Department, botanically speaking, under International Rules of Botanical Nomenclature. From now on, these rules will be official for Forest Service publications, reports, and correspondence involving scientific plant names. If the necessary financial and personnel arrangements can be made, it is intended to prepare a new Check List of the Forest Trees of the United States next fall or winter, in which International Rules will be adhered to. Until the revised list of names can be prepared, it may be necessary for the Service temporarily to adhere to the Latin nomenclature of Sudworth's Check List so far as U. S. tree names are concerned. The new edition of Standardized Plant Names, which is being prepared under the auspices of the Department, will also be in accord with International Rules.

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Aggregate CCC plantings for all purposes, including erosion control plantings, trees planted in National and State Parks, on Indian Reservations, on the public domain and on Wildlife Refuges, will exceed two billion, four hundred million, by December 31, this year, according to a press release recently issued by the Director's office. Of the 1,800,000,000 seedlings that have been planted to date for reforestation purposes, approximately three-quarters of a billion were planted in the Lake States of Wisconsin, Minnesota, and Michigan.

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"At first one would not think that there was a field for community forests in Utah, but upon digging further into the situation it is found that Utah is a fertile State for a community forest program," says Ernest O. Buhler, of the Washington Office of S&PF.

"It so happens that many of the critical watersheds are in State and private ownership with no fire protection. As a consequence the vegetation on these watershed lands is becoming more or less depleted through fire and overgrazing, which are forerunners of disastrous floods. The sources of a number of disastrous floods, causing great damage, have been traced to a burned-over area.

"Communities in the State are becoming aware of that fact and some of them have already established community forests as a matter of self-protection and placed them under adequate protection. Examples of this policy are Salt Lake City and Willard. In the latter case two floods caused damages in the neighborhood of $500,000. The source of these floods was an unprotected private watershed on which vegetation had been depleted by fire and overgrazing. The flood started from the burned-over area, and when the citizenry discovered this fact it got together to purchase the tract comprising some 3,000 acres. The money was subscribed by the citizens of Willard, the county of Box Elder, and the State highway department. The latter figured that it was cheaper to buy the land than to continue to repair the highway. After the land was purchased by these three agencies, it was turned over to the Forest Service for management."

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Regional Forester Evan W. Kelley will receive the honorary degree of Master of Forest Engineering from the Montana State University at the June commencement exercises, according to an item in a recent issue of the R-1 Bulletin.

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In the April issue of the Journal of Geography is a study unit for Junior and Senior high school students by Harriet Carter on "Our National Forests - A Social Problem."

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"The Earth and Life Upon It", a fourth-grade science book by Gerald S. Craig and Beatrice Davis Hurley, has just been published by Ginn and Company. This is one in a series of elementary textbooks being published by Ginn and Company, entitled "New Pathways in Science." Several Forest Service photographs, furnished by the Washington Office, were used in illustrating the section on "Some of Our Resources and How to Conserve Them."

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The American Forestry Association has issued a million new poster stamps designed to bring about greater public cooperation in forest fire prevention. The new stamp is in three colors and depicts the destruction of property, both timber and real, by a forest fire. It carries the slogan "Keep Your Country Growing — Not Burning." The stamps are available at $1.00 a sheet of 100 stamps and may be obtained from the American Forestry Association, 919 Seventeenth Street, N. W., Washington, D. C.

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The suggestion to plant a tree in memory of Robert Fechner this spring was made by the Chief of CCC Activities to CCC camps, in connection with the 7th Anniversary. Incomplete returns show that memorial trees or plots were planted in 18 different States and the District of Columbia and that 54 different camps participated. In several cases bronze tablets set in boulders were placed near the trees planted.

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E. L. Perry, of the Prairie States Forestry Project, writes that our note regarding the term "shelterbelt" in the May 13 issue of the Service Bulletin is misleading. It was intended to indicate that the word "shelterbelt" may now be used when referring to the plantings established by the Prairie States Forestry Project. The Project itself, however, should still be referred to as the Prairie States Forestry Project.

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The United States increased its number of motor vehicles in use by more than a million in 1939 over the preceding year to reach an all-time high in automobile registration for the nation, according to the Public Roads Administration.

A total of 31,009,870 motor vehicles was registered in 1939, State agencies reported to the Public Roads Administration. This included 30,615,087 private and commercial vehicles, an increase over 1938 of 1,129,407. In addition, there were 121,270 vehicles owned by the Federal Government and 273,513 owned by State, county, and municipal governments.

Thirty-six of the States reported an all-time high registration in 1939, and all but one of them, Nebraska, reported increases over 1938. The United States averaged one vehicle for each 4.3 persons in the country during 1939. This compares with one vehicle for each 4.4 persons in 1938 and for each 10.4 persons in 1921.

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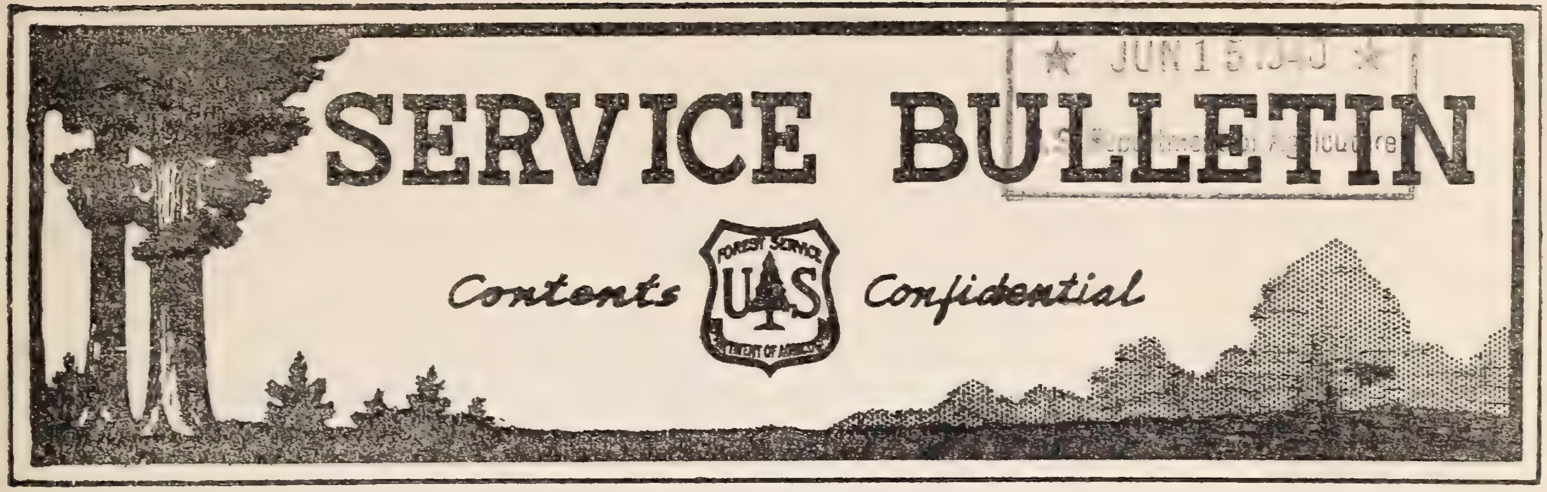

SERVICE BULLETIN

Contents Confidential

Vol. XXIV No. 12 Washington, D. C. June 10, 1940

CONSERVATION AS A FOUNDATION OF PERMANENT PEACE

Excerpt from Address by Gifford Pinchot, Eighth American Scientific Congress, Washington, D. C., May 11, 1940.

You may find it difficult today, when Conservation is accepted almost as widely as the Ten Commandments, to realize that only a generation ago there was no such thing as the Conservation policy. The very word Conservation, as we use it today, had no existence. But that is the truth.

The conception which we know as Conservation originated and was formulated in the United States Forest Service in the early winter of 1907. Conservation grew out of forestry. It was a contribution from the foresters of America to the permanent policy and the democratic principles of their country.

Like many another child of flesh or brain, Conservation was born without a name. But it had to be given a name before it could be introduced to the people.

After discussion among perhaps half a dozen men, the name Conservation was tentatively decided on. Thereupon it was submitted to and approved by Theodore Roosevelt, and the infant was christened accordingly. We know the growing youngster, thirty-three years old but growing still, by that same name today.

The hold Conservation has gained in these thirty-three years upon the civilized peoples of the world is little less than amazing. Today the soundness of the Conservation policy is everywhere accepted as a matter of course....

To the human race land is the basic natural resource. The demand for new territory, made by one Nation against another, is a demand for additional natural resources. And I need not point out to you how many times this demand has plunged the Nations into war.

In view of the foregoing, I have a definite plan to suggest--a plan for permanent peace through international cooperation in the Conservation and distribution of natural resources.

The Proposal

National life everywhere is built on the foundation of natural resources. Throughout human history the exhaustion of these resources and the need for new supplies have been among the greatest causes of war.

A just and permanent world peace is vital to the best interests of all Nations. When the terms which will end the present war are considered, the neutral Nations should be in position to assist in finding the way to such a peace. That being so, it would be wise to prepare in time.

The proposal is that the Nations of the Americas prepare now for an endeavor to bring all Nations together, at the right moment, in a common effort for conserving the natural resources of the earth, and for assuring to each Nation access to the raw materials it needs, without recourse to war.

In all countries some natural resources are being depleted or destroyed. Needless waste or destruction of necessary resources anywhere threatens or will threaten, sooner or later, the welfare and security of peoples everywhere. Conservation is clearly a world necessity, not only for enduring prosperity, but also for permanent peace.

No Nation is self-sufficient in essential raw materials. The welfare of every Nation depends on access to natural resources which it lacks. Fair access to natural resources from other Nations is therefore an indispensable condition of permanent peace.

War is still an instrument of national policy for the safeguarding of natural resources or for securing them from other Nations. Hence international cooperation in conserving, utilizing, and distributing natural resources to the mutual advantage of all Nations might well remove one of the most dangerous of all obstacles to a just and permanent world peace.

The Conservation of natural resources and Fair Access to needed raw materials are steps toward the common good to which all Nations must in principle agree. Since the American Nations are less dependent on imported natural resources than European Nations, and since they are already engaged in broadening international trade through negotiated agreements, their initiative to such ends would be natural and appropriate.

The problem of permanent peace includes, of course, great factors which the foregoing proposal does not cover. But it does cover that factor which is certainly, in the long run, the most potent of them all.

Facts Required

If the foregoing proposal is adopted, facts in support of it will be needed, and a plan for assembling them. The formulation of a general policy and a specific program of action would follow.

Facts for each Nation separately, for groups of Nations, and for the whole world might well be assembled under the general classes of Forests, Waters, Lands, Minerals, and Wildlife. In very brief outline they should include:

As to Conservation--Resources in existence, consumption, probable duration, waste, Conservation if any, necessary reserves, and available surplus.

As to Fair Access--Present interdependence of Nations in natural resources (raw materials), with the origin, destination, and quantities of imports and exports; present barriers to Fair Access; and sources of pressure upon Nations to acquire natural resources.

A Way to Assemble the Facts

The information just outlined undoubtedly exists in sufficient detail for the present purpose, and can be put together without original investigation. It could well be done through a commission appointed for that purpose representing all of the American Nations.

The gathering of information through the creation of such a commission might, I believe, properly be recommended by the Eighth American Scientific Congress to the Governments of the American Nations.

Formulation by the Commission of a plan and of recommendations to the American Governments for a general policy and a specific program of action, including the presentation of the plan when prepared to neutral and belligerent Nations, would follow.

Such a commission would be of immense and lasting value to the American Nations. It could not but advance their interests, both individual and mutual, in addition to opening a road toward a workable basis for permanent peace.

Finally, the situation in Europe and in Asia suggests that action for the purpose outlined above was never more necessary than at present.

HURRICANES AND TRAINING FOR FIGHTING FOREST FIRES

By A. B. Hastings, Washington

The New England hurricane may leave in its wake one lasting benefit -- better training of local men for forest fire control.

Since the fall of 1938 New England has been confronted with an unknown hazard from forest fires. Never before in recent times has there been such an accumulation of highly inflammable material as is now found wherever the hurricane struck. To meet such a situation extraordinary means were demanded, and have been taken, in hazard reduction and in salvage to permit maximum recovery. This spring 48 CCC camps, each with six 20-man crews, 15 crews of 50 men each (one of 100 men) specially organized by the Forest Service for this hazard reduction and fire control work (called Department of Agriculture, or D. A., crews), and 4,688 men organized in Commuting Crews of 15 to 20 men each, in addition to the regular State fire warden forces, stand by on call. Of the above CCC camps, eight are operated by the White Mountain National Forest, which is carrying on very important hazard reduction and fire control work in addition to the activities described in this article.

The Northeast hazard reduction administration immediately sensed the need for specialized training, not only for the CCC and D. A. and Commuting Crews but also for the State wardens. One of the reasons why it was necessary to concentrate on training is that up to the early fires of last year few, if any, local wardens had experience with fires in blow-down areas.

There was a natural hesitation about the possibility of a direct attack. Fire would burn so fiercely that it would be necessary, many felt, to depend for control upon natural fire lines such as roads or streams. Consequently the first serious fire burned over a very large area. This demonstrated that for effective control it was essential to work near the fire, cutting lines through the blow-down on the flanks and finally in front of the fire. This called for special techniques, special tools, and special training. The local wardens were introduced to the mysteries of the one-lick method and the "experts" learned something of the extent to which local fire control organizations had already advanced in the use of water. At the very start there may have been some reluctance on the part of State and local men to follow the methods advocated. The practicality of much of this "stuff" was soon demonstrated. For instance, a crew of twenty men was able to cut through heavy hurricane slash and, by cooling down the fire with water, attack it directly and generally keep it down to a very small acreage. The total State and private area burned in the six New England States in 1939 was 36,857 acres in 6,124 fires. By way of comparison, averages for the years 1934 - 1938 are 69,842 acres burned in 4,139 fires, giving 18 acres per fire as compared to 6 acres in 1939.

This year all of the hurricane-affected States are much better prepared than they were last year. Maintenance of this fine record will be due in no small measure to the comprehensive and intensive training which the firemen are receiving. It will be difficult, because in 1939 weather conditions were generally favorable.

Forest fire control training in the Northeast may be classified as follows:

Civilian Conservation Corps

The Boston office has carried on 2-day training sessions for camp superintendents and their training assistants or educational advisors for all State and private camps in each of the States. The program for these meetings was carefully worked out by the training officers, mimeographed Lesson Plans being prepared for each State. This instruction embraces not only the details of crew organization, training and equipment, but also policies governing coordination of State, Federal, and local programs, and supervision. Its objective is to enable the camp superintendents to redeem the pledge to the State protection forces made by the CCC which is to supply, from each camp, six trained, 20-man crews, upon call. These individual crews are separately quartered, fed, and worked, so that single crews can be most readily mobilized. The training of these crews may take approximately three working days or twelve 2-hour periods as some prefer. They are instructed in every detail of performance.

The D. A. crews, which are organized exclusively for hazard reduction and fire control work, are intensively trained in a similar manner by men from the Boston office. This also applies to the commuting crews.

State Forest Fire Wardens' Schools

Last year the Boston office was able to extend to the State of New Hampshire the services of trainer McReynolds to assist in training crews of local wardens. These men would turn out after work in the evening by appointment. Mr. McReynolds would first get them in a huddle and tell them how the one-lick method works. This was demonstrated by a crew which he brought with him for that purpose. The local men would then themselves construct fire lines, thus learning the one-lick method. This form of training proved to be very popular, and before the season was over local crews in between fifty and sixty towns were so trained. This, together with crews in 6 CCC camps, 5 D. A. camps, and 110 commuting crews made the total for New Hampshire. It is striking to note in this connection that only 27 fires out of a total of 700 in New Hampshire were fought by CCC or other Federal crews. The local town wardens took care of all the others. The fact that local wardens' crews can take training in pretty good shape was indicated in the Paul Bunyon field day last summer -- local crews having won first and second place in fire line construction! The experiences in New Hampshire led to the extension of this general type of training in other States.

This winter there have been several different types of training activity in addition to those discussed above, all aiming to meet the emergency situation resulting from the hurricane.

In New Hampshire and Massachusetts meetings of associations of forest wardens have continued and with added vigor. This is a very general type of meeting preceded possibly by a dinner. It may be an association of long standing but the special hazard situation now becomes the most important topic for discussion and action.

Perhaps the most important of all the training meetings are those of town wardens conducted by the State Forestry Departments. These sessions are frequently for the sake of instructing the wardens in the conduct of their work, including issuance of permits, and especially organization of fire fighting crews. Somewhat similar meetings have been held for many years. They may or may not be jointly conducted by the Boston office and State men in New Hampshire, Vermont, and Connecticut.

It is anticipated that the season of 1940 will probably present a maximum hazard from hurricane-thrown material with the expectation that the 1941 hazard should not be quite so great. There are still people who believe that catastrophies are inevitable. There are others who are of the opinion that the whole situation has been exaggerated. All will be relieved after the next two or three fire seasons are over and all are better prepared to meet inevitable emergencies than they ever have been before.

When the final chapter of the emergency program is written it may well be that intensification of fire control training in the State organizations will be recognized as the outstanding Federal contribution.

KEEP THE FORESTS GREEN--THEN WHAT?

By Thornton T. Munger, Pacific Northwest Forest Experiment Station

When anyone uses the slogan "Keep the Forests Green" as though it were the essence of forestry, I feel like saying "Oh Yeah." There is so much more needed than just keeping the forests green. Like so many slogans it is quite meaningless and misleading. Do we want trees of inferior species even though they are green, when we might have, by good forest management, superior species? Do we want misshapen and diseased trees for our next rotation when sound, shapely trees are not hard to grow? Do we want a scattered stand of bushy trees, bristling with big limbs, when better forestal care would produce tall, cylindrical trees free of knots?

It costs just as much to protect a low-grade, understocked stand from fire--perhaps even more--than a prime, fully stocked stand, and taxes are the same during its immature period. If tax money and protection costs are to be spent to hold land for future production, why not make sure that the crop will be really high grade and fully stocked, worth the investment, and not merely an assortment of green trees.

Some people are quite pleased to find a scattering of saplings on logged-off land--perhaps one every 25 or 50 feet--and think the land is reforesting; these will grow into a green forest and look good in the distance. But such understocked stands will not produce a commercially useful forest of the volume or quality of which the land is capable. From the point of view of timber production scattered trees are little better than nothing. If fully stocked stands are to be produced after clear cutting there must be an adequate seed supply nearby or the land must be artificially reforested if the property is to pay its way.

Where partial cutting is practiced--zero margin selection, for example--the good trees are all out; the defective trees and those of present minus value are left. Such areas look green and the public driving by thinks that is fine--the logger has kept the forest green. But is it so fine to high-grade the forest and let the next crop be made up of the offcasts of the virgin stand? Of course, some of the trees now of no value will have a future value, but rotten and misshapen trees will not become any sounder or more shapely. The productive power of the soil is not being used when the ground is partially stocked with old, conky firs or superannuated understory hemlocks. When selective logging is practiced--as it will continue to be and should be in parts of the Douglas fir region--the forest manager should be sure that he is doing more than keeping the forest green. He should provide by skillful use of the axe the right conditions for a fully stocked stand of desirable trees. Thus, his motto should be not merely to keep the forests green, but to keep them fully stocked.

"THE FINAL CROP"

By Benton MacKaye, Washington

(A Review of "Forest Outings" by Thirty Foresters, Edited by Russell Lord, United States Department of Agriculture, Forest Service, 1940)

These thirty foresters and the editor have done a unique job. This is meant literally --they have done a new kind of job. This is achievement in itself. They have done a good job also, but this fact is less important. They don't emphasize in words the big idea, though one can feel it all through the 283 pages. But on page 274 this statement appears:

"Ferdinand Silcox, . . . worked hard to advance, to humanize, and to coordinate land-use planning throughout our land. His first thought was always of the final crop--the people. He never visited a forest without asking 'Who lives here?' or 'Who uses this forest?': he always put that first in his inspections." (Underlining supplied)

Forests are for folks, not folks for forests. Such was the Silcox policy. An "axiom" if you like, but one usually forgotten and so not acted on. But Sil meant it.

The thirty foresters tell the story of "Your Forest Land", or your National Forests, though the fatherhood of "national preserves" is not mentioned till toward the end (page 195), as follows:- -

"The kings of England formerly had their forests to hold the king's game for sport and food, sometimes destroying villages to create or extend them; and I think they were impelled

by a true instinct. Why should not we, who have renounced the king's authority, have our national preserves, where no villages need be destroyed, in which the bear and panther, . . . may still exist, and not be 'civilized off the face of the earth'—our own forests, not to hold the king's game merely . . . but for inspiration and our own true recreation?" (Underlining supplied)
Henry D. Thoreau, "The Maine Woods", 1864

The authors do not state that Thoreau was the father of national preserves, but the above quotation indicates this to be the fact. Though 'The Maine Woods" was published apparently in 1864, Thoreau died in 1862. It may be somebody had previously proposed that we "have our national preserves", but such appears unlikely. The book would be richer with a brief discussion of this point.

The geography of the National Forests is excellently portrayed. A well recognized map of them occurs in the back of the volume. They cover 176 million acres, or nearly one-tenth of the national continental territory. They "offer everything that unsettled land can offer anywhere on earth," from -

"the edge of deserts to loftiest summits of wind-swept rock or snow. There are the hot, dry woodlands of pinon and juniper which grow in sun-baked soil and the cool, moist, alpine forests and meadows which during most of the year are saturated with the snow and rain and mist of mountaintops. There are the abused cut-over lands purchased by the Government for the sake of restoring them to productivity, and virgin forests . . . as before the days of Columbus. . . . "

These Forests embrace resources of various categories, including timber, water, range; these are the physical resources. They embrace also a great psychologic resource, a resource appraised as "above all else", namely—"space and stillness". Another name for this is refuge. "Refuge is provided for fish and game; why not for people?" Well asked. Acreages of wildlife refuges are given in a chapter on Game, and the principles discussed of wildlife management. Such principles "start with and are limited by the possibilities for managing the wildlife's environment. Too often wildlife has been thought of as something separate and apart from land, . . . "

Right here we get down to the heart of the matter—namely the psychologic resource of environment—primeval environment, the environment of wildlife, the environment of "space and stillness."

How to achieve this environment? First make it "natural and simple." Then protect "the resource against the added hazards introduced by recreational use." Finally

". . . provide graded steps through which the individual may progressively educate himself from enjoyment of mass forms of forest recreation toward the capacity to enjoy those demanding greater skill, more self-reliance, and a true love of the wild." ("Objectives", page 31.)

I have named these in my own order, and not that given in the book. What I name "finally" and place as most important is stated in the book as "a second objective." Here is where I take sharp issue with the authors. By placing this objective in the middle they place it in least emphasis. I would give it the most emphasis. Here is the kingpin point, so simple and obvious that it is all but universally overlooked; here is the basic and primary reason for preserving the largest possible square-mileage of primitive territory. The authors have stated the point with admirable conciseness; they have opened up a whole policy by their few well-chosen words; but they fail to recognize the big thing that they do.

The authors state what to do, and also how to do it. This they hide in the middle of page 77 in Chapter Five, The Wild. They quote from the 1934 report of the National Resources Board, from the section on recreational land use. Here are the strategic words:--

" . . . For the few, the trail and the primeval; for the many, the points of concentration and comfort.

"By sacrifices of small areas sufficient to house, interest, and entertain the masses, vast areas are preserved to the student--for today and for generations to come. . . . "

But these needed "vast areas" will not be "preserved" for the "generations to come" if right now they be invaded by a single road-mad generation, and cut to pieces by noise belts each from three to five miles wide. A whole chapter should have been devoted to this theme, and placed in the star position of the book. By not so doing the authors muffed a fly with all three bases occupied by members of the team of Roadomania.

But the authors anyhow have done a good job with this Chapter Five, The Wild. The trouble is they did not print it in red ink. It starts with a quotation from Bob Marshall. Read his impressions as he looked through space and stillness on the "snow-covered divide that seemed to bound the universe". Then turn to the bottom of page 74 where the authors say:--

"The extent to which emotions essentially patriotic and in a sense religious must enter into decision of wilderness use or disuse may be gaged in some part by reading the 'platform' of The Wilderness Society, organized at Washington, D. C., early in 1935."

Next go ahead and read the "platform", the first draft of which, incidentally speaking, was written by Bob himself. Read on pages 78 and 79 the definitions under "Zones of Wilderness", which distinguish areas that are "wilderness", "wild", "virgin", or "scenic", as the case may be. Herein are the beginnings of a real technology for conserving the natural resource of environment.

And so for the whole book. I see in this volume a pioneering step in the evolution of a coming technique for conserving a psychologic resource corresponding to the now well-known techniques for conserving the physical resources. What silviculture is to sustained-yield timber, wilderness culture is to primitive environment. And the "culture" consists in "leaving it alone." These thirty foresters have builded greater than they know in broadening the scope of forestry to embrace the spirit plus the substance; the forester's job from now on covers, in addition to the proximate crop--the timber, "the final crop--the people."

COMMENTS ON "ROVING RANGERS - OR TRANSIENT FORESTERS"

By Charles H. Stoddard, Jr., Central States Forest Experiment Station

The article in the Service Bulletin of April 15, "Roving Rangers - Or Transient Foresters", touched a note familiar to many of us. Thoughts which many a Forest Service man has harbored at various times -- but usually left unexpressed -- are well presented. It is true that the other side of the story was not stressed -- but does it need to be? Much more against the frequent transfer policy might have been presented.

There are two angles to the question -- the personal and the professional. Each must be considered separately so far as possible.

It must be granted at the outset that there are times and places where transfers are both desirable and necessary. Emergencies, "trouble shooting", and broadening experience are all good reasons. Promotions, filling vacancies, and the need for specialists are sufficient justification many times, unless overdone. Overdoing transfers is probably the real cause for complaint.

The effect of frequent transfers differs with individuals. Most of us have become resigned to the inevitability of transplanting. Some men welcome frequent changes and the variety of scene. Others feel a definite sense of instability in being unable to take root. Long periods of difficult adjustment follow a move. The purchase of homes or much furniture is out of the question. The uncertainties besetting the world today -- including July 1 -- are made more difficult by constant shifting.

Aside from the effect on the individual's personal life, there are important professional considerations involved. Foresters, in the final analysis, are forest land farmers who should be close to the soil. A forest crop takes a long time to grow, and it takes a long period of observation for a man to learn about the effects of forest cultural measures in his stands. The real progress in forestry in the Old World was made by men who lived their entire lives within a few thousand acres, who knew every tree, logging chance, and bend in the trail. They developed a continuity of forest practice gained by experience and they had a real "feel of the forest".

Frequent transfer makes it difficult for American foresters to develop this attitude. Interest in details of management and other problems in specific localities is lost when a the Forester is transferred too often. Not only does the forest suffer from changed policies, but individual often loses his enthusiasm and interest. Administrative problems and "red tape" soon become ends in themselves rather than the means to better forest management.

Human relationships are also important. People in forest communities are slow to place confidence in strangers. A new man is at a disadvantage for a year or more until the people begin to know him and he grows to know the forest. This aspect is not new.

In reviewing the comments following the article, I was sorry to note the generally defensive nature of the reactions. Perhaps those in Washington do not realize that the turnover is actually so large. One man asked for constructive suggestions; here are a few:

(1) Make long-distance transfers only in cases of absolute necessity.

(2) Use "details" of fairly long duration if a man is needed for emergency work, or if it is felt that he needs to broaden his point of view, rather than resort to frequent transfers.

(3) Determine from the man himself if he really wants to remain in a certain region or locality. This is especially important if he is doing some special work in which he is very much interested.

(4) If a long-distance transfer for special work is necessary, and if the man involved prefers his present location, give him the assurance that he can return when the job is completed.

(5) If a man must be transferred from a job in which continuity of policy is essential, and in which he has shown considerable enthusiasm and interest, make it possible for him to maintain some contact with his previous work.

Everyone realizes that some transferring is essential to the efficient operation of the Service. However, it is an opportune time to re-examine personnel policy with a view toward reducing the rate of movement. This is principally true of those men who are directly concerned with the management of specific forest units and who are in close contact with the people in forest communities, and with the various State and other public officials with whom they must cooperate.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

BARBOUR, W. R. National forests in the southern Appalachians. illus. Behind the Wheel 4(11): 4-5. Apr. 1940.

BICKFORD, C. A., and BRUCE, DAVID. Fire discovery in the longleaf slash pine type. Conservationist 6(11): 14, 18. Apr. 1940.

BONNEY, M. C. Use of the cull caliper in scaling white oak stave bolts. illus., tables, chart. Jour. Forestry 38(4): 351-355. Apr. 1940.

BRANDSTROM, A. J. F. An economic basis for silviculture. Jour. Forestry 38(2): 182-187. Feb. 1940.

BRAY, M. W., MARTIN, J. S., and SCHWARTZ, S. L. Sulphate pulping of silver fir. illus., tables. "Literature cited": p. 36. Paper Trade Jour. 109(18): 29-36. Nov. 2. 1939.

______ ______ ______ ______ ______ ______ Sulphidity effect in the sulphate pulping of Douglas fir. tables, charts. "Literature cited": p. 45. Paper Trade Jour. 109(17): 40-45. Oct. 26, 1939.

CASSADY, J. T. Certain ecological characteristics of orange sneezewood. illus. "Literature cited": p. 90. Ecology 21(1): 87-90. Jan. 1940.

CHIDESTER, G. H., BRAY, M. W., and CURRAN, C. E. Growth factors influencing the value of jack pine for kraft and sulphite pulps. illus., Paper Trade Jour. 109(13): 36-43. Sept. 28, 1939.

CRONEMILLER, F. P. The convict creek test stream. illus. Assoc. Sportsman 7(1): 6, 13. Jan. 1940.

DEMMON, E. L. Relationship between forests and water in Mississippi. Conservationist 6(8): 15. Dec. 1939.

GEMMER, E. W., MAKI, T. E., and CHAPMAN, R. A. Ecological aspects of longleaf pine regeneration in south Mississippi. tables, chart. "Literature cited": p. 86. Ecology 21(1): 75-86. Jan. 1940.

GODWIN, D. P. The parachute as an aid to National forest protection. illus. Aero Digest 36(4): 44-45, 124. Apr. 1940.

HOUGH, A. F. Longevity of black cherry in Pennsylvania. illus. Forest Leaves 30(2): 16. Mar./Apr. 1940.

HUBERMAN, M. A. Studies in raising southern pine nursery seedlings. "Literature cited": p. 345. Jour. Forestry 38(4): 341-345. Apr. 1940.

KIRCHER, J. C. Let's control forest fires. illus. South. Banker 1 - 3. Mar. 1940.

KUENZEL, J. G. (With C. M. GENAUX, Iowa state college, Senior author). About these Iowa forests. illus. Farm Sci. Reporter 1(1): 13-15. Jan. 1940.

MACDONALD, ALAN. Wood pulp - Southern industry. Agr. Situation 24(4): 16-17. Apr. 1940.

MATTOON, W. R. More on the piney woods. (Letter to the editor). Amer. Forests 46(4): 146. Apr. 1940.

McNAUGHTON, V. B. "I remember, son". Conservationist 6(11): 15. Mar. 1940.

MORRIS, W. G. Statistical analysis of fire weather station distribution. tables. Jour. Forestry 38(4): 318-321. Apr. 1940.

NELSON, A. Z. Comments on Connaughton's definition of watershed management. Jour. Forestry 38(4): 364-366. Apr. 1940.

PEARSON, G. A. Growth and mortality of ponderosa pine in relation to size of trees and method of cutting. tables, charts. "Literature cited"; p. 327. Jour. Forestry 38(4): 323-327. Apr. 1940.

PICKFORD, G. D. Range survey methods in western United States. tables. "Literature": p. 12. Herbage Review 8(1): 1-12. Mar. 1940.

PLASKETT, C. A. Modern trends in the shipping container industry. illus. Barrel and Box and Pkgs. 45(3): 11-12. Mar. 1940.

______ ______ A way to greater economy in packing. illus. Barrel and Box and Pkgs. 44(12): 7-11. Dec. 1939.

RANDALL, C. E. REA aids in fighting fires, saving trees. illus. Rural Electrification News 5(8): 12-14. Apr. 1940.

SAUNDERSON, M. H. Land costs and investment standards for Intermountain sheep ranch operations. illus., tables. Natl. Wool Grower 30(4): 11-13. Apr. 1940.

SCHAFER, E. R., and PEW, J. C. Effect of rate of feed of wood to stone at various stone surface speeds in the groundwood process. table. "Literature cited": p. 45. Paper Trade Jour. 109(15): 43-45. Oct. 12, 1939.

_______ _____ _____ _____ Effect of the wood-stone contact area in the groundwood process. table, diagr. "Literature cited": p. 42. Paper Trade Jour. 109(20): 39-42. Nov. 16, 1939.

SHEA, J. P. "Our pappies burned the woods". photos. Amer. Forests 46(4): 159-162. Apr. 1940.

STEWART, GEORGE. Forest service range research seminar. Amer. Soc. Agron. Jour. 32(3): 235-238. Mar. 1940.

SWEET, C. V. Plywood in relation to the veneer package industry. illus., chart. Barrel and Box and Pkgs. 45(1): 7-9. Jan. 1940.

TIEMANN, H. D. Lessons in wood technology. XXI. "Compression shrinkage" and "set". illus. South. Lumberman 160(2015): 43-45. Mar. 15, 1940.

VAN BECKUM, W. G., and RITTER, G. J. Yield and viscosity of holocellulose and some of its cellulosic fractions. "Literature cited": 109. Paper Trade Jour. 109(22): 107-109. Nov. 30, 1939.

THE EDITOR DISCOVERS

Mr. W. D. Muir, Silviculturist in the Division of Forest Management, Forestry Commission of New South Wales, Sydney, Australia, who for the past several weeks has been making an American forestry trip and has visited various Forest Service offices in order to obtain an over-all picture of fire protection, research, and control work in the different regions, writes the Acting Chief as follows:

"I have to acknowledge Mr. Kramer's letter dated April 2, enclosing a copy of Dr. Shea's illuminating paper on Fire Prevention in Southern Regions. This paper is a very definite example of the constructive thought given by the Forest Service to the ever many aspects of Fire Control.

"With my tour of United States forest areas almost completed I am feeling almost reluctant to leave for my own country. This feeling is no doubt due to the unfailing courtesy and kindness displayed to me by all of the many officers of the Forest Service. I have met throughout the United States. Any words of mine at this stage could not adequately express my deep appreciation of the assistance rendered to me by all ranks of the Service, but you have my assurance that I will not readily forget my tour of the United States.

"If, at any time in the future, any one of your officers is visiting Australia in either a personal or official capacity, I would feel it an honor and a pleasure to arrange a tour of our forest areas, both in New South Wales, and in other States of Australia."

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Acceptance of an offer of the United States Maritime Commission to provide training to five hundred CCC junior enrollees as apprentice seamen and marine radio men has been announced by the Director's office. The young men will be selected by the CCC and will be turned over to the Maritime Commission at Camp Dix, New Jersey, on July 1 for enrollment in the Merchant Marine. The new marine enrollments will bring to nine hundred the total of CCC boys who have been chosen this last year for merchant ship training. Instead of the twelve months' training given to CCC youths selected in previous enrollments, the July 1 enrollment will be for six months, with a possibility that additional training may be offered. Four hundred of the youths will go to the Gallops Island station in Boston Harbor and one hundred to the St. Petersburg, Florida, station.

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In an article in the May issue of "Agricultural Leaders Digest," M. L. Wilson, Director of Extension Work, Department of Agriculture, said "At the present time I consider land-use planning the most important job farm people, the Extension Service, and other agencies of the Government have set themselves to do."

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Dr. Haven Metcalf, principal pathologist in charge of the Division of Pathology in the Bureau of Plant Industry, died on May 24. He was 64 years old and had not been in good health for several months. He is credited with having organized the science of forest pathology in this country and made many contributions to the literature in this field. He was author of nearly 100 technical articles on tree diseases. Doctor Metcalf entered the Department of Agriculture in 1906.

AN APPEAL.

"....over the once peaceful roads of Belgium
and France millions are now moving, running from
their homes to escape bombs and shells and fire,

without shelter, and almost wholly without food."
– President Roosevelt, May 26.

The innocent victims of Europe's wars--hungry women and children--appeal to you. Help the Red Cross meet its $10,000,000 quota. Give without stint to your local American Red Cross.

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 13 Washington, D. C. June 24, 1940

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U. S. Department of Agriculture

STABILIZED SAWMILL OPERATIONS

By T. Krueger, R.2

Three cases at one time in which established sawmill operators have been outbid by others have brought to mind a serious condition confronting the established operator. What happens is this:

We have been advocating the use of native timber for such purposes as it is adapted, and we have succeeded in getting several reliable operators to go into the native lumber business. They have either purchased or leased property in near-by towns, established a yard, put in sheds, and built up a good business dealing exclusively in native timber. They have done just exactly what we hoped would happen to make an outlet for our native timber from National Forest sales.

Then something happens. This established operator needs more timber. But his having developed a good business in a new product makes others want to cut in; or a competitor selling a low grade, shipped-in product wants to eliminate this native lumber yard which has taken away some of his business. Therefore, the established operator is overbid by a price which, being a business man who cannot operate unless he makes at least a slight profit, he cannot possibly bid. Competitors will even go to the extreme and, for example, bid 25¢ each for fence posts which only can be sold for 15¢, but since these are optional they can raise the price, as they don't have to take them. Again they will bid a price which cannot be justified by any reasonable appraisal under fair labor and working conditions.

I can hear someone say that this is an easy problem to solve -- just go ahead and advertise another unit for him. But when a working circle is up to the sustained yield this is not possible, since only so much can be advertised annually or periodically, and we now in this Region have a number of working circles which are cutting close to the sustained yield. So what! If the established operator loses the bid he is out, as in many cases there is no other timber available, nor can we double up on the number of mills in that locality.

It seems to me that we need some way to give stability to our good operators, but under the present system we cannot get the best operators and good businessmen to invest in a venture where raw materials are liable to be cut off each time they have to bid on a new block of timber. There has been a good deal said lately about working towards better social conditions at camps, better housing, and better sanitation; that we are looking for the good businessman who will build up a good business of native lumber, invest his money, pay good wages to employees, and allow for a good respectable American standard of living — a man who is willing to learn the business and spend his life in developing it and rendering a real service to the community. In my opinion, we will have difficulty in attaining these objectives until we can provide some means whereby we can assure him a continuous supply of timber at reasonable appraised values.

Sustained yield which has been given the green light in our publicity is only the first step in proper timber management; stabilized timber operation must in some way follow as the next step. As private timberlands are cut out our problem will become more serious, because in some areas we perhaps already have too many sawmills. I fully realize that existing law directs us to advertise timber for competitive bids on the underlying theory not only of full market value for the timber which is offered for sale, but also to give equality of opportunity to citizens of the United States to purchase that Government property. I further realize that we can at this time require that the timber be manufactured within a limited territory and that we can require satisfactory financial ability to carry out the provisions of the timber-sale contract, but these do not solve the problem. If by some means we can stabilize our good operators and eliminate the unreliable, low-wage paying, unsanitary camp operator, we will also eliminate many a Ranger's headache.

THE SUPERVISOR SOLVES A HUMAN EQUATION

By P. A. Thompson, Washington

It is occasionally necessary to fill district forest ranger vacancies by the promotion of junior foresters who lack adequate experience and training as assistant rangers. The case of John Doe involved a young man just out of college with but one year's experience in a CCC Camp, his only contact with ranger work being incidental. Suddenly, just at the beginning of the fire season and at the end of the fiscal year when many reports must be prepared, he was placed in charge of a ranger district of 150,000 acres, with its multiple problems of land use. His knowledge of policies, regulations, precedents, procedures, reports, etc., was woefully inadequate. Arrangements were made by the Supervisor to have the former incumbent, Ranger Jones, remain on the district with Doe for three or four days and for an early visit by the Assistant Supervisor. Both gave him as much assistance as possible in the short time available, then Doe was "on his own."

A year passed and it was rumored that Doe was incompetent. He was criticized for being slow, for lack of confidence in himself, and especially for his inability to make decisions on his own responsibility. Naturally this resulted in strained relations between Doe and the personnel of the Supervisor's office. He knew from rumors and letters that he was considered unsatisfactory as a ranger. His reaction may best be described by quoting his own words: "I'll show those fellows that I am a good ranger. I would rather be a ranger than anything else and I'm going to be a good one."

Doe was a rather slow, tenacious "bull dog" type of individual, which explains his reaction to the criticism of his work. He was thorough and accurate and possessed real technical ability, his principal difficulties being his inability to make decisions and plan his work efficiently.

Doe had been assigned to the ranger district for nearly two years before the Supervisor realized that possibly the major reason for his failure was his lack of proper training for the job or on the job. In an effort to correct this, he was detailed for two months to another district to work under an old-time ranger. The results were more detrimental than beneficial, because the older ranger did not possess training ability, or had not been adequately prepared to meet his training responsibilities.

The Supervisor next spent several days with Doe and finally suggested transfer to another type of work, such as timber sale administration. Doe rejected this suggestion, stating: "I will not admit I am a failure as a ranger and I am going to be a good ranger or bust." The Supervisor admitted that Doe's deficiencies were not incurable and agreed to give him another chance.

Having realized that definite action was needed, the following plans for corrective action were considered for Doe:

1. A detail to another district to work under a ranger known to be qualified to train him. This was rejected because of lack of funds, and because a previous detail had developed a decided antagonism on Doe's part toward this method.

2. Intensive supervision by members of the Supervisor's staff, with special emphasis on assisting Doe to make his own decisions. After discussion it was agreed, however, that intensive supervision was one thing Doe should not have, especially by men not trained in personnel work who admittedly did not feel themselves qualified to help him.

Ranger Jones, who was Doe's predecessor, was considered an efficient ranger and with training had developed some ability in personnel work. He knew of the criticism of Doe; nevertheless he had considerable respect for his ability. The Supervisor discussed the whole problem with Jones. It was decided that Jones should contact Doe as often as possible, since they were assigned to adjoining districts, and informally attempt to help him correct his deficiencies. The importance of self-confidence and the necessity for making his own decisions were to be particularly stressed, and Doe was to be complimented on any improvement shown, no matter how slight, as concrete evidence of confidence in him. Additional improvement was soon evident.

The final solution to the problem, however, was somewhat unusual. Ranger Jones was transferred, which left his position on the more important ranger district vacant. The Supervisor, after careful consideration, decided to transfer Doe to the vacancy, reasoning that the promotion would convince him that the confidence of the Supervisor and his staff was a reality and not just talk. The Supervisor spent several days with Doe, talking over the new assignment in a friendly "fatherly" fashion.

It is too soon to attempt a definite evaluation of results. However, Doe has been in his new assignment nearly a year and according to information received there is definite improvement. Doe reports that he is happier than he has been for years and feels that he is accomplishing something worth while. Information from the Supervisor's office indicates Doe is doing a good job, that his official reports are adequate, objective and arrive on time, that he is making his own decisions, and seems to be a different man.

This case brings to our attention the fact that we need better standards for the training and supervision of new employees, and particularly do we need intelligent, sympathetic, and patient research and analyses of our personnel problems before they materialize into disciplinary cases.

LOOK BEFORE YOU SWAT

By L. H. Reineke, Northeastern Forest Experiment Station

It is well known that Forest Service members sometimes venture into the woods, on occasion even leaving their cars to do so, thereby exposing themselves to many perils, some insidious, some spectacular. The science of safety engineering requires that potential victims be forewarned and instructed in the recognition and reduction of hazards, and proper treatment should events develop to a state of eventuality.

Wee microbes, tiny insects, and sinuous snakes conspire to make the forest primeval less prime for humans and foresters. Tularemia and spotted fever rear their ugly heads in unison with vicious Reptilia, and this Triumvirate Diabolos, this ghoulish trio, unlike the seraphic Simian trio of China, seek ever to return man to the dark earth from which some did not spring so far.

But means are at hand to confound these wily machinations. Artful espionage has discovered the working methods of the trio, and human cunning has devised circumventions, buffers, and counterfoils to minimize the hazards.

The gage of battle has been thrown down, our defense mobilized, and our foes uncovered. A tactical manual has been prepared, and it behooves the forest intruder to know its contents. This three-section manual has been printed in sober service to mankind by the National Rifle Association in various issues of its monthly journal, "The American Rifleman," available from the Association and most sporting goods stores.

The first section was printed in the July 1938 issue, under the caption "Tularemia and the Sportsman", by tactical director, Dr. E. W. Given. Tularemia, usually considered a clean fighter, employing rabbits as its only agents, is here exposed in all its duplicity. Chipmunks, squirrles, woodchucks, porcupines, crows, and even some game birds give refuge to Tularemia, from whence issue microbe-laden ticks, fleas, and flies, flying with deadly cargo to their human objectives. Compunctionless, some of these are potent warriers alive or dead, deer flies accomplishing their mission of infection *even when squashed on unbroken, unbitten skin*, even as bomb-laden planes which crash on their objective, or newly-shot skunks with automatic reflexes.

Section two also was written by Dr. Given, and published in the July 1939 issue of "The American Rifleman" under the title "Tick Fever." The worst sort of cupidity is unearthed herein, for man's best friend, the dog, is unwittingly made the agent of *Dermacentor variabilis*, whose actuarial batting average is 25 percent. This tick, carrying the virus of the Rocky Mountain Spotted Fever, is common through much of the South and East, and Fever shows satanic cunning in striking his victims through their canine friends. Fever's virus is reactivated in the dog tick after rapacious engorgement on the blood of an unwilling dog host. Once rejuvenated, the tick's bite carries Fever to his victim, and Fever will not be denied his victim by a smashing death to his agent Tick. Squashing the enemy may introduce the virus through unbroken skin in unholy retribution for self-defense. Meanwhile, axis-partner *Dermacentor andersoni*, the western variety of fever tick, scorns resort to dogs, attacking directly, with a 90 percent actuarial batting average, with squashing victories like those of *D. variabilis*.

The tactical manual's third section was composed by Dr. Dudley Jackson. First printed in May 1936, it reappeared in the April 1940 issue, labelled "Management of Snake-Bite."

Reptilia viciosa is the most gentlemanly of the Unholy Three, and does not resort to subterfuge. Spectacular blitzkriegs are his invention, yet a sense of moral responsibility or sportsmanship limits his use of them only to cases when honestly believing his privacy or life is threatened. Intentionally or merely blunderingly, Homo sapiens sometimes gives cause for such blitzkriegen, and Dr. Jackson's tactics of recovery and retrenchment (Milit.) here prove their worth.

As a matter of common defense, public warning to humans is advisable (the foe needs none) and it might not be amiss, at this time, for Personnel Management, Safety Division, to digest and summarize the "manual" referred to, distributing the information in condensed form to foresters, too.

(The Federal Inter-Departmental Safety Council has recently taken action to get before the Government employee reliable information concerning matters that affect his health and safety. Two statements - one on "Ticks and Spotted Fever" and the other on "Poison Ivy" - have been prepared by the Council from data furnished by authoritative sources. Statements on other matters of health and safety will be issued by the Council from time to time. Editors of publications for Federal employees have been asked to cooperate with the Council in bringing such information to the attention of their readers. An extract of the statement on "Ticks and Spotted Fever" appears in this issue of the Bulletin. Summaries of similar statements will appear in later issues. - Ed.)

"HOME IS WHERE THE HEART IS"

By Mrs. W. I. White, Manistee

I have just finished reading the article entitled "Roving Rangers -- Or Transient Foresters" in the Service Bulletin of April 15. What I have to say may not go down in the annals of Forest Service history, for who am I but just the wife of one of your transient foresters, but I herewith give you my "two cent" contribution.

I have always felt that "Home is where the heart is" and not necessarily any particular house or acre of ground. History may have failed to record any case where a man has taken up a musket in defense of a boarding house, but I am sure our roving ranger would fight just as hard as the French peasant or the New England farmer if in that boarding house he had all that was near and dear to him. My transient forester would fight to his last ounce of strength to combat a "blitzkrieg" even in our rented "Home." Consequently, I heartily disagree with the the statement that "Home" has ceased to have much meaning to the large percentage of Forest Officers.

In my nineteen years' experience in the Forest Service, I have had to leave many "Homes." I admit there have been pangs of regret at leaving friends and the house we made "Home." However, the challenge of making good on a new job and the widening of our acquaintances and fine friendships has always thrilled us, and we are glad to accept that challenge. I believe the majority of Forest Service families welcome transfers, because of the element of promotion that frequently accompanies them and also because this is an adventurous group.

My personal opinion is that the advantages of transfers far outweigh any disadvantages for the organization, the Forest Officer, and his family. The esprit de corps which has played such a great part in establishing the prestige of the Forest Service must benefit greatly from the frequent contact and intercourse of its personnel. Then if it be admitted that a Forest

Officer's helpmeet has any direct influence on this esprit de corps, the mingling of forester's families and extension of their acquaintance must react also to the good of the Service.

Irrespective of the advantages for the man himself, which we all recognize, there are the broadening and educational benefits for his wife and children. Certainly it is a privilege to have the opportunity of living in many different parts of the country, even if it is only for two or three years in each place. There are so many things to see and learn about in this wonderful country of ours.

There are disadvantages, to be sure, for the transient's children in frequent changes of schools, but I think these children do have one very great advantage over those of "stay-sot" parents in the early learning of adjustments in life. It is an important lesson that has to be learned if success and happy associations are to be achieved. A child who has learned that lesson, in addition to reading, writing and arithmetic, is ready to meet life standing firmly on both feet and to cope with any situation.

So here's to the Forest Service and its flexible policy of assignments. Long may it live!

PRAISE FOR "FOREST OUTINGS"

Charles A. Beard, noted historian, writes:

"Many thanks for 'Forest Outings.' The pictures are beautiful and the text is full of sound information and philosophy expressed in strong prose. I wish that every American could see and read it and visit some part of the good work described therein."

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James H. Causey, a prominent investment broker and a trustee of the recently organized society "Friends of the Land," writes:

"Some nice person in your Department has been good enough to see that I got a copy of 'Forest Outings' by thirty foresters, and edited by Russell Lord. This is the most beautiful document I have ever seen and as fascinating as it is interesting, and I hope it has a wide circulation because of its great value. This is only another one of a multitude of reasons why I am increasingly proud of our Government.... This is bound to stimulate deep and abiding interest in the highly important subjects which are therein treated."

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Stuart Chase writes: "I have been going through the book you so kindly sent me, 'Forest Outings,' as edited by my good friend Russell Lord. It is a splendid piece of work and you can rest assured that I will boost and recommend it wherever possible."

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J. D. Harper, Editor-Manager of the "National Live Stock Producer," says: "Your FOREST OUTINGS is a honey! Nobody likes to be in the woods better than I and I am sure we will be glad to write a piece about this publication for our July issue that I hope will please you."

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Dr. Henry B. Ward, chairman of the Educational Committee of the National Wildlife Federation, writes:

"Your letter of May 28 is at hand with the copy of 'Forest Outings.' For this I am deeply indebted. It gives exactly the information I have been anxious to obtain and presents it in an attractive fashion.

"For years I have felt that the forests of the Nation gave unusual opportunities for recreation without at the same time involving the areas in such fashion as to provoke bad usage. I have been as you probably know an active objector to the development of mere recreation in National Parks which, as unique areas that should be preserved as nearly in natural conditions as possible for the education and inspiration of future generations, are too easily subject to irreparable damage. No wise warden allows football in a museum however much he may applaud it in appropriate places.

"I think that the public is becoming wise to this phase of the situation and I certainly shall do my best to promote the view on all possible occasions."

TICKS AND SPOTTED FEVER

(Extract from statement prepared by Federal Inter-Departmental Safety Council)

Each spring and summer, millions of ticks swarm over the grasses and low bushes and trees of woods, fields, vacant lots, and even home lawns in many parts of the United States. Some parts of the country are more heavily infected than others but even in the most heavily infected areas, like Montana, only about one tick in three hundred is infected.

Rocky Mountain Spotted Fever is transmitted to human beings by the bite of an infected tick. The best way to prevent Rocky Mountain Spotted Fever is to keep a careful lookout for ticks on the clothing and body, and remove them before they can do any damage. The tick can only feed and transmit the disease by attaching itself to the skin, in such a way that is hard to remove. The head may even be embedded in the skin. The tick most commonly attaches itself to the hairy parts of the body to feed. So if you find a loose tick crawling on your clothing or your body, even if it is an infected tick (one to three hundred chances it isn't), it has probably done no harm. This is a signal, however, to look for others.

If the tick is stuck, it is probably feeding or has fed already. It should be removed with a small forceps, a piece of cotton or paper rather than with the fingers, since it may be an infected tick and the infected blood may get on your hands. Do not crush the tick when you remove it. Burn it in a saucer or old can. If the tick has already bitten you, paint the tick bite with an antiseptic such as iodine, and wash your hands and the forceps thoroughly, then wipe them off with alcohol.

During the tick season, campers, fishermen, picknickers, and children playing in uncleared land should have a tick inspection at least once a day. Remove all the clothing and make a careful search, paying particular attention to the back of the neck above the hairline and under the arms. Ticks usually are found on these hairy parts of the body. If there is an animal pet in the family, it too should be searched for ticks, and it should be dusted with Derris powder.

Ordinarily, an infected tick must have fed from six to eight hours or more in order to infect an individual. For this reason, prompt search for ticks, their removal before they have attached themselves to feed, or very soon after feeding (two to four hours) greatly reduces the chances of infection.

The United States Public Health Service has discovered and developed a vaccine which is valuable in the prevention of Rocky Mountain Spotted Fever. Vaccination is most frequently requested by persons who are going for extensive trips, into tick-infested areas. It must be given at least ten days before exposure to ticks, since it is not certain that it has value after the tick has bitten. The Public Health Service distributes the vaccine free of charge to private physicians andhealth departments. Persons who wish to be vaccinated should request the vaccine from their family physician or local health officer.

FORESTS GIVE EXTENSIVE EMPLOYMENT

It is estimated that at least 153,000 men in the Lake States are dependent upon logging and forest-product industries for all or a substantial part of their income. This includes 51,000 men engaged in logging and transportation, 33,000 men working in sawmills, pulp mills, and other primary industries, and 69,000 in the secondary wood-using industries. It does not include employment in lumber yards, carpentry, or factory work where wood is used but is not a part of the finished product.

One acre of mature timber in the Lake States, when all merchantable products are utilized, gives employment to an average of 10 men for one week. An average acre of old-growth forest contains 9 thousand board feet of sawlogs and 15 cords of pulpwood, fuel and mine wood. At the average rate of 1½ man-days for logging and hauling and 2 man-days for milling, the cutting of the 9 thousand feet of sawlogs means 31½ man-days employment. At the average rate of 1½ man-days per cord, the cutting of 15 cords of pulpwood, fuel and mine wood provides an additional 22½ man-days for the acre, or in all, 54 man-days.

These computations are based upon present forest practice, which means clear-cutting. Under a selective cutting system, when not all merchantable trees are cut at one time, employment per single acre will be less, but cutting will be carried on over a larger acreage with the assurance that employment will be continuous. - Technical Note, Lake States Forest Experiment Station

CONSERVATION ACTIVITIES OF GENERAL FEDERATION OF WOMEN'S CLUBS

At the Council Meeting of the General Federation of Women's Clubs held in Milwaukee, Wisconsin, May 20-25, 1940, Mrs. H. E. Kjorlie, Chairman of the Committee on Conservation of Natural Resources, reported as follows regarding the Federation's conservation activities:

"Every State but New York has a Conservation Chairman. These energetic women report that - (1) Memorial Forests continue to grow in acres acquired and trees planted; (2) individual tree planting is extensively featured, so is shrub and wildflower planting; (3) innumerable beautification projects are fostered for parks, library and school yards, along highways and cemeteries; (4) wildlife and wildflower problems are constantly being studied, also humane trapping; (5) park tours are encouraged and so are mental tours into State resources, their uses and abuses; (6) chairmen are working with lay groups to rid the State Conservation Commissions from political entanglements; (7) a general inquiry into the phases of work done by varioss conservation agencies has brought about a keener working knowledge on the part of club leaders; (8) many legislative measures have been actively supported and dangerous ones strenuous' opposed; (9) essay and poster contests have given many a clubwoman a great insight into the wealth of her State and Nation; (10) the support of conservation education in the schools is hastening its adoption as a part of the curriculum in many States; and, (11) Conservation Week, Wildlife Week, Arbor Day, and various other designated observances have been wholeheartedly sponsored by this cooperative group of Conservation Chairmen. They help carry the torch which lights the way for the wayfarer of tomorrow."

The following resolution was adopted at the Council meeting:

"WHEREAS, We believe that the growing and care of forest crops, like the raising of other crops, is distinctly a phase of agriculture, and is an integral part of the nation-wide programs of soil conservation and land use planning carried on by the Department of Agriculture, in cooperation with farm people, Land Grant Colleges, and other agricultural agencies; and that the services rendered by the Forest Service are closely related to the work of the Agricultural Adjustment Administration, Bureau of Agricultural Economics, Plant Industry, and Animal Industry, all in the Department of Agriculture; and

"WHEREAS, We also believe that forest, watershed and range lands in public ownership are often adjacent to or intermingled with those in farm or other private ownership, thus requiring coordinated treatment; that forest research applies to private and public lands alike; that timber, forage, watershed, and recreation areas are so intermingled on national forests that their administration should be under one head; and that the removal of any or all forestry functions from the Department of Agriculture would result in confusion and overlapping jurisdiction; and

"WHEREAS, the General Federation of Women's Clubs has long been active in supporting forest conservation measures for our country to insure the greatest good to the greatest number of people; and

"WHEREAS, the Board of Directors of the General Federation of Women's Clubs has twice gone on record in favor of the administration of the Forest Service remaining a function of the Department of Agriculture; therefore be it,

"RESOLVED, That the General Federation of Women's Clubs in Council Meeting assembled, Milwaukee, Wisconsin, May 20-25, 1940, support the opinion of the Board of Directors that the administration of the Forest Service is an appropriate function of the Department of Agriculture, and record our opposition to transfer of the Forest Service to any other department of the Federal Government."

MORE REGARDING RANGER STATIONS

By H. N. Wheeler, Washington

There are many locations where a ranger station is necessary, but some Forest Officers are suggesting that perhaps too many have been built and at too great an expense. The ranger should have a comfortable home so located that he can attend to the business of his district to the best advantage of the Forest Service, and with sufficient regard to the care and convenience of his family. A contented ranger family is a great asset to any forest. The ranger must be a part of his community and enter into the life of the community if he is to render the best service to the Government. So he needs comfortable quarters properly located. However, it is possible the building may cost so much that the ranger cannot afford to pay the rent. It seems a bit out of step for a ranger to pay as much rent to live in a Government station in some isolated place in the forest as he would if he lived in a town or a populous community where social, school, and other advantages are available. Are there not many places where the ranger should acquire his own house or rent living quarters thus saving the expense of building and upkeep to the Government and at the same time giving the ranger a chance to live more satisfactorily his own family life, and in many cases rendering better service to the Government? At one time, when transferred to another forest, I rented my modern 6-room brick house, in a pleasant city, for $18 per month. Thirty-five follars per month for similar or less desirable housing in a far corner of the forest would seem a bit excessive.

(O. suggests that further information on this subject is included in the GA-G1 section of the Manual, in which the statement is made that "rental charges are to be based primarily upon the determined reasonable value of the quarters to the employee during the particular period and in the particular locality." - Ed.)

THE EDITOR DISCOVERS

A new lightweight radio has been developed at the Forest Service radio laboratory at Portland, Oregon, for use of the fire fighters in Regions 1 and 6 who will test the practicability of parachute jumping this summer. The new SJ radiophone has been developed so that the "smoke jumper" can keep in touch with the plane pilot and with his headquarters when he reaches the ground. This set weighs only six pounds with dry batteries and all accessories. It measures 2 by 4½ by 12 inches, and operates on ultra-high frequencies between 30,000 and 40,000 kilocycles, having a two-way communication range covering an optical distance which with sufficient elevation may be as much as a hundred miles. The transmitting portion of the tiny radiophone is crystal-controlled, a system of maintaining accurate transmitting frequency heretofore used only in permanently located stations or in relatively bulky portable or mobile units.

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The method being used by the Washington Office to inform the field about the activities of the Inter-Bureau Coordinating Committee on unified county programs has received the following favorable comment from Bushrod W. Allin, Head, Division of State and Local Planning, Bureau of Agricultural Economics:

"We have received copies of Mr. Peterson's memoranda commenting upon the various unified programs which have been considered by the Inter-Bureau Coordinating Committee, together with transmittal memoranda to various field personnel of the Forest Service.

"This type of memorandum, we feel, is a very important instrument in making land-use planning real cooperative planning between farm people, technicians, and program administrators, and in making planning effective in dealing with problems confronting farm people.... We hope the Forest Service will continue to follow this procedure. Also, we hope other agencies of the Department concerned with the farm program will recognize the value of this procedure and prepare appropriate memoranda to field personnel concerned with each unified program.

"Planning committees in many counties not designated as unified counties rapidly are moving toward the action phase of planning. We hope your field personnel will be able to participate in the planning activities in these other counties, contributing to the committee's work and drawing from it in every way possible to make for a greater realization of the importance of the Nation's forest resources and their use under proper methods of management to improve the welfare of farm people."

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William Mollenhauer, Jr., silviculturist at the Allegheny Forest Experiment Station reports that:

"A statistical analysis was made of the snow data which have been collected on the Allegheny River Watershed during the past winter to determine the accuracy of the existing data and to improve the sampling methods for future surveys. A comparison of 50 snow samples taken under hardwood cover with 50 snow samples from a coniferous area indicated that there is a greater variation in snow depth and moisture content under a softwood stand....

"The snow studies were intensified on the Allegheny National Forest in the period of rapid melt which occurred March 7 to April 3, and the following facts were noted:

"1. At the start of the period of rapid melt there was from 25 percent to 30 percent more accumulated snow in the forest than in the open.

"2. There was a definite time lag in the melting of snow under forest conditions and the run-off was less per day despite the greater water accumulation. The forested watershed lost 1.9" of water during the period of rapid melt while loss on the open watershed amounted to 3.1".

"The run-off from forested areas was from 3 to 4 days behind the open areas, a lag of sufficient length to show possible benefit in planning flood control for this region."

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The following item appeared in a recent issue of the "Times-Herald," Washington, D. C.:

"The will of the late Robert Marshall, Forest Service division chief, leaves between five and ten million to be distributed four ways:

"1. Change the nation's economic system to one of use and not for profit. 2. Unionization of the unemployed and employed. 3. Civil liberties activities. 4. Preservation of outdoor America.

"These are the trustees: Gardner Jackson, Labor's Nonpartisan League; Edwin S. Smith and Huber Blankenborn, both of NLRB; Jerry O'Connell, former Representative, Montana; George Marshall, New York economist and Robert's brother; Roger Baldwin, Civil Liberties leader; William Zimmerman, Indian Affairs assistant commissioner; Claus J. Murie, Biologist, Interior; Raphael Zon, Forest Service; Robert S. Yard, former division chief, Indian Affairs; Irving Clark."

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Washington State civic leaders have mobilized for the largest coordinated campaign in the history of the State against man-made fires, according to the "Seattle Post-Intelligencer."

Governor Clarence D. Martin took the lead by issuing on June 2 a forest protection proclamation in which he declared it to be the personal responsibility of everyone within the State to unite in a determined effort to "Keep Washington Green." "Every citizen, every logger, smoker, fisherman, camper, and every visitor," the Governor stated, "should be made keenly conscious that it is his individual responsibility and duty to see to it that he does not start a forest fire in our State."

On June 5 the anti-fire drive was officially launched at a banquet and conference in Olympia, when full support to the program of education and personal action to prevent forest fires was pledged by leaders in the lumbering and logging industries, sportsmen, State and Federal forestry officials, women's club leaders, school officials, and newspaper publishers.

Steward H. Holbrook, former leader in Northwest logging circles before embarking on a successful writing career in the Northeast, will direct the campaign.

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"West Coast Woods", a highly illustrated publication of the West Coast Lumbermen's Association, is a striking current example of the use being made of photographs to explain the lumber industry to the layman. The logging, milling, distribution and uses of Douglas fir, western hemlock, red cedar, and Sitka spruce are shown by 36 of the numerous photographs taken by Kenneth S. Brown for the association. This modern photographic record is also an attempt to prove the association's contention that "West Coast lumbering is the most photogenic of all American industries." As such, it should provide many ideas for Forest Service photographers.

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Word has been received that John Hatcher, in charge of the Hat Creek Ranger District, Lassen National Forest, and formerly of the WO Division of Forest Land Planning, was married to Helen Silcox, a niece of our late Chief, at Reno, Nevada, on June 8.

The fire season is now under way on the Lassen so Mr. Hatcher notes. "She is coming out from Charleston because I can't get away now and so that we'll share the experience of ranger district life this summer."

TIMBERLAND OWNERS APPRECIATE CCC

Major Charles S. Cowan, Chief Fire Warden of the Washington Forest Fire Association, has this to say of the help of the Civilian Conservation Corps in the 1939 Annual Report of the Association:

"The Civilian Conservation Corps again fully lived up to the reputation they have themselves made. On the more serious fires, such as Deep Creek, Ludlow Lake and Speilei, they attacked the fire under able and experienced leadership, in such a way as to elicit a full meed of praise for a job well done. It is difficult, after seven years of constant association, to realize what would be the effect of a complete withdrawal of these forces. They are organized, they are trained, and much more to the point, they are most ably led. One has but to examine the record of man-days spent on the fire line to translate such efforts into dollars, but it will always be difficult to translate such effort in acres of forest land saved from the blight of fire. It is a pleasure to me to be able to again state, that the Civilian Conservation Corps once more proved itself to be a really splendid branch of Government, working for the benefit of the people of the United States. Its full usefulness will never be understood by those not connected with forestry in the field. Suffice to say, the Washington Forest Fire Association knows and fully appreciates all its very splendid work."

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 14 Washington, D. C. July 8, 1940

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U.S. Department of Agriculture

A "NEW KIND OF FOREST SERVICE" NEEDED

By J. Alfred Hall, Central States Forest Experiment Station

I want to take up again the general problem of land use and people in that broad zone of the Central States usually referred to as "submarginal for agriculture." More specifically, I refer to the rugged hill lands of southeastern Ohio, southern Indiana, Illinois, the Ozarks, the Cumberland Plateau, the Highland Rim of Tennessee, the Horseshoe Rim of Kentucky, and the western Kentucky coal fields. In all of this territory there are certain patterns of land use and land abuse that are general. In a great deal of it mineral resources give some small employment to a part of the resident population. However, in most cases I find that this type of employment meets the requirements for only from 5 to 10 percent of rural dwellers. If there is any part of the United States in which rural poverty at its worst and the consequent destruction of land values are more clearly shown, I do not know them. It seems to me that there is considerable room for some thought with regard to these territories, at least more thought and clearer thought than most that has come to my attention. The best treatment given, that I have found, is in Miscellaneous Publication 205, "Economic and social problems of the southern Appalachians," but this does not include nearly enough territory.

So far, I get the impression that such country is a sort of no-man's-land in general economic thought. Most planning deals with pretty good agricultural land. So far, at least insofar as I am aware, nobody has had the nerve to face the issue of exactly who are really farmers and who are merely occupiers of small pieces of submarginal land. I submit that there should be some subdivision of this broad category "farmers" and that the attack, the programs, the economies of all farmers are not to be classed broadly together in planning. This matter of definition is not one merely of setting up bureau responsibilities; it carries with it the actual designing and execution of programs that mean everything to millions of very poor people.

There is no uniform pattern of rural poverty. In many territories it may be definitely ascribed to absentee landlordism, share cropping, or other evils that exist even on excellent agricultural lands. Rural poverty in the hill lands about which I am talking arises mostly from (1) the low productivity of the very small amount of plow land, and (2) terrific maladjustment of population to the economic base. There are no real comparisons possible between the two general types of economies. In Arkansas the share cropper may occupy good land, owning nothing, living in abject poverty. In the hills, ownership and hard labor bring no returns but miserable living and hardships.

The first kind of rural poverty could perhaps be partially corrected by social legislation dealing with land ownership, tenants' rights, rentals, credits, and the like, if and when Government can be brought to face the issues squarely. There are no such solutions for the poverty of the hills. There the economic base is lacking, and that which exists is being destroyed.

Comparison between the hill "farms" and Corn Belt farms leads to greater absurdities. The typical Corn Belt farmer owns or rents 120 acres of land, most of which is arable and productive. He may be head over heels in debt or deliver most of his crop to the landlord; but he is still infinitely better off than the hill man. He has enough left to eat; his scale of living, opportunities for life on a full scale, are so far above those in the hills that to class all together as just "farmers" appeals to me as being nonsensical.

The point is this: The economy of Corn Belt agriculture, poorly adjusted though it may be, is potentially an economy in which the resident population can prosper and lead complete lives. The economy of the hills is a limited one, overcrowded, continually pressing against its limits, spewing out surplus population, feeding the relief rolls, and consuming its own limited economic base.

The small landowner in the hills has perhaps 100 acres of land. It is an anomaly that land ownerships are smaller in these submarginal territories. Only 10 acres may lie well to plow, and that is cultivated crudely; one horse and a "jumping shovel" may be the whole equipment. The family works from morning till night with hoe and hands growing a meager crop.

The other 90 acres is steep. One need but drive through the hills awhile to see what happens. A patch is cleared and broken. A crop or two can be gathered before erosion has taken such a toll that cultivation must be moved to a new patch, newly cleared. This is not virgin forest being destroyed; it is second or third growth that has come in on fields long abandoned for agriculture. The whole process is obviously leading to disaster, but what can the owner do? He must live and support his family. This land is all he has. His unremitting toil plus slim grazing obtained by a few cattle in his own woods pasture or on "open range" must give him all his livelihood.

I submit that preaching or demonstrating soil conservation practices on a broad basis to that man is like whistling into a hurricane. Hunger drives him to exploit the land. Terrace farming? He cannot afford to spend a nickel. Lime? What could he use for money? Soil-conserving crops? This man raises things to eat and trade for a few necessities. Soil conservation has no significance to him; he must rob the land in order to live.

As has been said so many times, the forest he considers to be his enemy. He fights it with fire and axe because it returns him no apparent value and prevents his plowing the land. His tradition is all agrarian; yet he occupies a land not fit for agriculture. He knows nothing but tilling of the soil.

Yet, to far too many people these are all "farmers." In Congress anybody in overalls with mud on his shoes and milk on his jumpers is a "farmer." Isn't it time we subdivided this vast group of men who live on the land?

Everything in the Ohio Valley is not plow land. Does the existence of 45,000,000 acres of forest lands in the Central States, most of it outside the Corn Belt, mean nothing?

I'd like to see a farm plan for this man I've been describing whose total annual income may be less than $150. Resettlement failed, and any such plan will fail. These people want to live in the hills. Loans merely perpetuate a bad situation and are not loans anyway; they are merely another form of relief. ACP payments mean nothing to these men. They cannot afford to take land out of production.

The plain truth is that no solution has yet been developed whereby these people can make enough, where they are, to approach the theoretical minimum standard of living as set up about 1933 or 1934 by the Department. But, even $400 or $500 a year would be untold affluence. They are thrifty and frugal beyond the comprehension of a Corn Belt farmer. The question then is: Can anything be done to bring their living up to even that low standard? I believe it can, but it will require more than extension bulletins or radio speeches, or bright young men to make farm plans, run contours, and design terraces.

The Forest Service is already in the business to deal with just these lands and these people whether we like it or not. But we are poorly organized, poorly financed, and operate under limited legislative authorizations. We are buying land in and around these poor hill residents. They are our neighbors and in many cases we are their landlords. We practice "rehabilitation in place" and at least try to fix up a decent place to live. We try with very limited funds to furnish some employment. But at best we can only scratch around on the surface. We have to fight legislative limitations, States' rights, jealousies of other bureaus and, I regret to say, sometimes considerable inertia within our own ranks.

I know men who can still think only in terms of "block ownership." There is lots of territory in the Midwest where it can never be had. They want to "move them out" and lessen administrative difficulties. Where to, and what to, these men do not answer. To some, "stumpage values and timber sales" seem to be the sole objective of Federal ownership and administration, and they will spend days in trying to squeeze the last nickel out of a timber sale. The Forest Service can do this job I've tried to outline, but it will have to be a new kind of Forest Service.

What is the job? First, people must be given a little hope, and that can come only through close, direct, and frequent contacts with people whom they trust and who they believe are out to help them. Our sublimity project shows that when we go into the land management business we must have agronomists, animal husbandrymen, home demonstration agents, and a whole corps of men and women who live with and among these people working with them day in and day out. I visualize Federal ownership of a lot of wild land, interlaced and interspersed with small areas of plow land occupied by families. It may be that most of this plow land will have to be in Federal ownership because I despair of getting decent land use in these crowded hills by anything short of outright purchase. As owner we can defeat abuse by regulation. As benevolent landlord we can cooperate in teaching, in improving land, in installing permanent works. Left in individual ownership the small pieces of decent land will be exhausted, the hills burned, and the end is starvation. Under public ownership intensive methods can be developed that will end the pressure on the hillside. We must move toward highly intensive agriculture. Conversion to grazing means too limited a base.

Farming in this economy will be subsistence farming whether we like the term or not. Our efforts must be bent toward bringing the forest to its full capacity to afford opportunities for labor. From it must flow the cash income to supplement agricultural income. In the long run it may exceed the latter.

Development of intensive agriculture in the bottoms, far more intensive than anything that we have hitherto comprehended, will stop the pressure on the hills, the burning of the woods, the deadly downward economic spiral. Work in the woods and on products of the woods will be the best deterrent to fire known and provide a living. To do the job we will have to have authority to cut, manufacture, and sell, for I do not believe private industry can or ever will do the job. Profits are not the objective. The objective is improving the life of people.

I have sketched in very broad terms a program that appeals to me as practical, visualizes the Forest Service in the role of a real land management agency dealing not only with forest lands and the marketing of timber but with resident families who make their subsistence from small areas of plow land under the control of the Forest Service and derive cash income from labor in the forest and on the products of the forest. The role of research in the layout of such a program is perfectly clear. Intensive forest management, far more intensive than we have visualized, will be necessary in order to provide the necessary income for the maintenance of these populations. Thoroughgoing and extensive economic studies will have to be made in order to properly design, orient, and plan the layouts that are contemplated.

Unfortunately, as far as I am aware, no State in this territory either is in position or of a mind to undertake anything approaching the problem that I have outlined. All of these territories depend upon State aid for schools, for roads, and Federal relief for existence. I propose the use of at least equal sums to present Federal relief expenditures to build a sound economy that will eventually end relief.

(Assistant Chief Kneipp comments as follows on the foregoing article: "All gospel truth. We know Hall is right. There are now under our administration several N. F. units of which most of his statements are true. Why not demonstrate on them our capacity to handle this larger job?"

(Since Mr. Hall's article may give the impression that this work is being entirely slighted by the Service, the following article will help to balance the picture. - Ed.)

HOW FOREST SERVICE TENANT PROGRAM IS CONTRIBUTING TO RURAL HUMAN WELFARE

By Payson Irwin, Washington

The farm and subsistence tenant program of the Forest Service is a distinct contribution to rural human welfare. On the land purchased within the National Forest boundaries, particularly in the eastern forests, there are usually many tenants occupying small farms on subsistence plots in the midst of submarginal, or tree-covered areas. Many of these small farms have excellent agricultural land and have been carefully farmed for several generations. In the earlier days of the Forest Service, when the pressure for land was not as intense as it is today, such occupants were moved off the forest area and it was all planted in trees or else allowed to reproduce naturally. Today, however, with the greater population pressure and the need for good agricultural land, no matter how small the plot in these districts where forests are cultivated, the Forest Service has established a policy of maintaining these parcels, encouraging the tenant to make use of them, and aiding him to better ways of utilizing the land.

Such is the broad program of the Forest Service, but it involves much detail. It is necessary in the first place to make a classification to determine those areas which have lands suitable for cultivation and are accessible to well established roads. Where a farm may be quite unsuitably located an attempt is made to move the tenant to a good piece of land located in a part of the forest close to good roads. With the location settled, attention is given to the house, well, and barn. It is the purpose of the Forest Service to see that each tenant has a weatherproof, screened house on a good foundation, a sanitary water supply, and sanitary toilet facilities. In many forests, especially in the southeast part of the country, these simple developments have lifted the tenant and his family to a much higher plane of living, for many of them had never lived in a house without a leaking roof.

Help in better farm practices follows the physical rehabilitation of house. Tenants are aided in soil conservation and erosion control and, with help from the Farm Security Administration and Soil Conservation Service, farm plans are developed. There is hope even that the vicious financial ring that throttles the southern tenant farmer may be broken.

This program of rehabilitation in place has been put into effect in many of the National Forests. Experimentation with it began on the Sumter National Forest in South Carolina. There on the Long Cane and Enoree Units were about 400 tenants on forest land. Most of them worked 20 acres, or one-mule farms. The houses were in deplorable condition. The water supply was contaminated. Many of them were without toilet facilities. Beginning in a small way the Supervisor experimented with rehabilitation. It was found that at a cost of about $225 a house, including the aid of the CCC camps, that the houses could be made weatherproof, screens put on, and the well rebuilt to give a dependable water supply.

In the Cumberland Forest in Kentucky the same work is going on. There a number of new houses were built and better agricultural land selected for the tenants. In the Shawnee Forest in southern Illinois, a notably poor farming area, considerable rehabilitation has been done. In Missouri, on the Clark and Mark Twain Forests, there is a population almost as dense as that in South Carolina, and as rapidly as possible the houses are being put into shape and the other parts of the program established. The cut-over region of the Great Lakes has offered particular problems to those who are working towards the Forest Service program. The problems vary with the different forests and several variations of the rehabilitation in place program have been tried.

In addition to this work of rehabilitation in place the Forest Service is carrying on two vital experiments in community development. With the financial aid of the old Resettlement Administration and the present Farm Security Administration, the Forest Service built two communities. One of them is near Drummond, on the Chequamegon National Forest, in Wisconsin. It is a community of 32 units, the houses of three or four rooms, and each unit with 20 acres of land. The other group of farmsteads is in Kentucky, near London, and adjacent to the Cumberland National Forest. It has 66 units, varying from 3 to about 20 acres a unit. The houses are of 4 and 5 rooms. In each of these communities the settlers were selected from submarginal farms within the forest areas and they are given work by the Forest Service sufficient during the year to furnish them with $400 or $500 in cash income. In addition, they are encouraged to develop their farm plots for their subsistence needs and to dispose of the surplus in the local markets.

Work is furnished the settlers on roads, stand improvement work, and other forest activities. In the case of the Cumberland community a timber operation on the forest is carried on and the settlers are employed in the operation.

The Forest Service program is having a vital effect on the lives of thousands of people. It is aiding and bringing stability to communities that have been deteriorating as ghost towns. It has brought hope to many who were without hope. But the rehabilitation in place program has been done under considerable handicap because there has been a lack of funds. There is an immense amount of work to be done and very little to do it with. We need recognition for this work by the Bureau of the Budget and Congress in its appropriations.

PRE-SERVICE TRAINING

By H. C. Lee, R. 2

The probability that for some time to come a majority of forest school graduates will, of necessity, seek employment in the Government Service emphasizes the need for a more selective recruitment policy directed at the men who will be inducted into the Service in the lower grades.

The present policy of cooperation between the Forest Service and forest schools partly fulfills the need. As a further step in this direction, I would suggest the possibility of a cooperative arrangement between the Forest Service and graduate schools in forestry whereby the Forest Service would furnish problems or separate phases of problems currently in need of solution as material for research by graduate students.

I have observed that much of the effort put forth by students in fulfilling their thesis requirements is unproductive and therefore fruitless. Frequently, due to lack of experience with the problems facing the field, the student, after casting about for a problem, will in desperation choose a subject far too extensive for his limited experience or the time available. In other cases, the student will rehash a dead issue. In both instances, the students too frequently end up by contributing exactly nothing to themselves or to the general fund of knowledge outside of the exercise of going through some mental gymnastics.

Advantages should accrue to both parties through the functioning of such a plan. The student would be placed in a position to work on a live issue and, in addition, would acquaint himself with problems with which he may be concerned in the future.

As for the Service, the chance to acquaint prospective employees with the organization's technical problems, the opportunity to get a line on future research specialists of promise, and possible other material advantages appear worth the supervision and effort that would be required of the Service.

Assignment of students to definite problems could be best accomplished through cooperation on the part of the faculties involved and representatives of nearby Forest Service offices. Supervision could be attained in the same manner.

The problems themselves should preferably be short enough to enable the student to accumulate and analyze the basic data in a year's time. An exception to this proviso would be the possibility of assigning individual phases of a larger problem which can be solved by attacking its several components separately.

(Since there is a committee in the Washington Office for consideration of suggestions of this kind, we are referring Mr. Lee's suggestion to that committee. – Ed.)

"OLD JULES" COMES BACK TO LIFE

By E. L. Perry, Prairie States Forestry Project

What may have been the biggest forestry field day on record was staged Sunday, June 16, and went off without an untoward incident. Though thousands of people wandered at will over some millions of acres of terrain, no one got lost or fell off a mountainside, and no forest fires blossomed out in their wake.

The scene of the event was our shelterbelt planting area in central Nebraska, where the pioneers burned buffalo chips and twisted hay in lieu of wood; where timber is still reckoned in terms of numbers of trees rather than acres, and a grove more than a stone's throw across is a notable "woods."

The idea for this glorified show-me trip was conceived when Carlyle Hodgkin, farm editor of the Omaha World-Herald, and Garth Champagne of our Nebraska Unit made a trip through the shelterbelt planting area last fall. Hodgkin was tremendously impressed by the plantations, and averred that every Nebraskan ought to see them. After that, of course, it was but a step to the question "Well, why not?" The promotion department of the World-Herald saw in the idea an opportunity both for public service and publicity for the paper, we saw a chance to acquaint townspeople with the shelterbelt program and farm forestry in general, and the 21 towns in the area were quick to grasp the benefits to be derived from unlimited publicity for their section - to say nothing of the dollars which the "tourees" might be expected to leave behind them.

Lyle Jackson, attorney, Republican National Committeeman and one of the ablest organizers in the State, was enlisted to forge an organization to put on the affair, and it is largely due to his energy and persuasiveness that all of the diverse elements in the section pitched in together and worked like beavers for its success. The World-Herald devoted reams of space to the celebration, prepared cuts of an illustrated map of the tour area for local papers, and printed a 25,000 special edition of the map for distribution by Chambers of Commerce and from information booths. The Forest Service constructed and put up some 1500 signs of various kinds to mark the routes and to call attention to and describe the various points of interest. These included not only shelterbelts but Clarke-McNary plantings, old timber claim groves, and anything else of interest to the visitor. The service also maintained information booths at strategic points on the highway. The State Highway Department and the Highway Patrol furnished men to keep traffic flowing smoothly, and above all things, the weather man provided a perfect day for the occasion.

There was no way of getting an accurate check on the number of visitors to the area, but in the afternoon 12,000 of them forgathered at Neligh (population 1649), to be welcomed by Governor Cochran and to hear a very inspiring address by Mari Sandoz, author of the prize-winning novel "Old Jules" and other works. Miss Sandoz customarily declines to make speeches, but accepted on this particular occasion because "Old Jules" (her father) was a pioneer Nebraskan with an almost fanatical love for trees. In addition to his welcoming address, Governor Cochran made a radio transcription for use in connection with a broadcast "salute" to the towns participating in the celebration.

Six bands from as many towns were on hand, and the citizens of Atkinson, arriving on a special train, were arrayed in pioneer costume as an advertising stunt for their forthcoming

"Hey-Day" celebration. The program was short, the weather was fine, and, to use the words of the country correspondent of yesteryear, "a lovely time was had by all."

Except for the Governor's party, no attempt was made to "conduct" the tour. The visitor had a map showing what was to be seen and where, on the several optional routes indicated, and he was at liberty to go wherever he chose and to hurry or tarry as the spirit moved him. All of the marked routes, if followed through, wound up eventually at Neligh and the speaking program, but the touree was perfectly at liberty to turn off and go visit Aunt Hannah on the farm or hurry home to the children if he chose. Probably upward of 20,000 people traveled within the area during the day.

There is now a movement on foot to make this an annual affair, and the town of Pierce has already put in a bid to be host to the speaking program next year. In point of time and geography it fits in very well between the "apple blossom trail" celebration in the southeastern part of the State in the spring and the Nebraska National Forest Field Day in the western section in the fall.

DANVILLE COMMUNITY FOREST RECORDS

Story III - Three Years To Establish A Community Forest

By Ernest O. Buhler, Washington

M. Jonathan Sanborn called the first meeting of the newly organized community of Danville on March 10, 1760. The inhabitants met, discussed, and elected their officers. Although the entire community at that time contained only 58 voters, 22 of them were given an office. Among them were 2 hog constables. They were required to catch stray hogs and put them in the pound. Other officers included the jobs of selectmen, assessor, tithermen, fenceviewers, field drivers, etc.

Seventeen days after the above meeting, they met again: "To see how much money you will raise for priching this present year. To see how much money you will raise for the school this present year."

It was voted to raise 500 pounds old tenor for preaching and only 300 pounds old tenor for schooling. The minutes were attested as follows: "A True Entrance a test - Dyer Hook - Parish Clerk."

Their next task was to hire a full time minister. A warrant was sent to the voters requesting them to meet and discuss the matter. "To see if you will chuse a Commite to hier a menister or to vote that the Selectmen shall hier a menister."

The voters met at the meeting house and concluded that it takes money to engage a minister and that this money should be raised before he is hired. As a consequence - "It was voted that the selectmen show how money is raised for the hier of a menister for this year." This they did in several ways. Among other things they decided to hold an auction at which they would sell for one year the privilege of sixteen church pews. All sixteen privileges were sold. An entry was made for each sale and no privilege was sold for less than 142 pounds old tenor. One pound old tenor probably had in that locality a fluctuating value from 10¢ to 30¢ depending upon the times. While one committee searched for a minister, another committee commenced to search for the community land. This land was to furnish fuel for the minister, a place for his garden and pasture for his cows. Since his salary from a pioneer parish like Danville was small, he was expected to help his income by being a part time farmer. Additional income was also forthcoming through gifts from the parishioners. A detailed list of such presents is found in the diary of their first minister. A typical entry: "Mr. Dyer Hook; a cheese, 5 or 6 lbs. of beef, one quart of rum. David Quimby, a rosting pig."

It took the Danville people almost three years to find their minister and it took them about the same length of time to assemble the 75 acres of community land. When the lands had been assembled, they were managed for the first 30 years by the Selectmen. Special committees were appointed from time to time to do a specific job. For instance, on July 16, 1761, "Captain Jonathan Sanburg, Mr. Samuel Webster, and Mr. Elisha Bachelder were chosen a committee to go to Mr. Sparhawk (a prospect for minister) and agree with Mr. Sparhawk what part of our Parsonage Land shall be cleared or improved by him and what part shall be kept for wood and timber."

On February 25, 1771, Captain Isarael Dimond and Mr. Humphrey Hook were appointed "To take care of wood and timber on parsonage lands. To see where the parsonage 25 cords is to be cut to best advantage of the parish, the geeing of the wood to be auctioned off to lowest bidder and prosecute anyone who shall trans-grace in cutting down said wood and timber on said parsonage lands." Similar entries appear every year until the Revolutionary War breaks out.

CARNEGIE'S DESERT LABORATORY TRANSFERRED TO FOREST SERVICE

After six months of negotiations a deed of conveyance has been executed and recorded covering the transfer to the United States of the Carnegie Institution's internationally known Desert Laboratory located 3 miles from the business center of Tucson, Arizona. The arrangements for the acquisition of this property, by donation, were initiated by the Southwestern Forest and Range Experiment Station and consummated by the Chief's office and Region 3.

The transfer includes 220 acres of land owned by the Institution, with approximately 24 acres additional in smaller parcels to be conveyed later; 640 acres of leased State lands; a one-story laboratory building of native stone, 20 by 122 feet, with two wings, 16 by 36 feet; a second building, 28 by 46 feet; several smaller buildings to be transferred at a later date; and the necessary appurtenant structures such as power line, pipe lines, storage tanks, garage, and fence surrounding the deeded and State lands. The Institution's investment records show the value of this property to exceed $80,000. Included also in the donation is a great variety of scientific apparatus, office equipment, shop tools, valued at probably $15,000, and in addition what is said to be the best biological library in the Southwest.

The Desert Laboratory was started in 1902 on the recommendation of an advisory committee of the Carnegie Institution of which Gifford Pinchot was a member. It has been continuously used by the Institution since that date for experimentation on methods by which plants performed their functions under the extraordinary conditions existing in the desert. The results of this work have been set forth in over 400 journal articles, monographs, and books. Many foreign as well as American scientists have made use of the facilities of the Desert Laboratory for carrying out special investigations. Dr. Forrest Shreve, present director of the Desert Laboratory, will complete his investigations during the next few years. All other research work here by the Institution is being closed out.

The buildings will be renovated and the site further developed, for use within the next year as the headquarters for the Southwestern Forest and Range Experiment Station.

THE TIMBER SALVAGE REEL

By Bernard Frank, Washington

Forest Service activities in hazard reduction and timber salvage have achieved the unique distinction, along with the exploits of Paul Bunyan, Casey Jones, John Henry and the Kentucky Mountain feudists, of winning a place in the Nation's folklore.

Out of the windthrown forests of New Hampshire has just come a new and lively "country" dance significantly named The Timber Salvage Reel.

The story is that Mr. John Page of Keene, New Hampshire, nationally known folk dance master and collector of folklore, was invited to "call" at a local country dance. On reading the announcement he found to his surprise that he was to lead a "Timber Salvage Reel." This required quick thinking. Rising to the challenge with his usual versatility, Mr. Page promptly worked out the vigorous movements and calls befitting the title. In this simple act he filled a permanent niche for forestry in the folklore of the land.

As in the Lady Walpole reel, Pop the Weasel, and Arkansas Traveler, the odd couples in the contra formation change places and become "active." (Ladies and gents forming two parallel lines facing each other).

Should there be any folk dancers among Service families who might want to try this truly indigenous foresters' reel, the calls and movements, as performed at a recent "shindig" of the Potomac-Appalachian Trail Club, are as follows:

First call: "First, third, and every other couple cross over." (Odd ladies and gents change places).

Second call: "Do-se-do with the one below." (Arms folded, ladies and gents pass right shoulders back to back with corner).

Third call: "Do-se-do with your partners all." (Same as above but performed by odd or active couples only).

Fourth call: "Swing in the middle, down the center to the tune of the fiddle." (Odd gents swing partners twice around in square dance style, then sashay down the set and back).

Fifth call: "Cast off." (Odd gents and ladies change places with corresponding corners, thus moving down one place in the set).

Sixth call: "Right hand mill; left hand mill." (Odd and even pairs of couples cross right hands, gents to gents and ladies to ladies, circling left once around; then switch to left hands across circling right back in place).

Seventh call: "Head couple change over." (This call usually given only once at end of first complete movement - new head couple then becomes active and progresses down the set.)

The calls are then repeated beginning with "Do-se-do the one below."

REASSIGNMENT OF FOREST SERVICE LEGAL WORK IN SOLICITOR'S OFFICE

In the Office of the Solicitor, the legal work of the Forest Service hitherto has headed up in the Conservation and Marketing Division in charge of Fred Lees. By memorandum dated June 13, the Solicitor has advised the Acting Chief that hereafter it will be handled by the Land Policy Division, under the direction of Philip M. Glick. The change is a phase of the readjustment made necessary as a result of Reorganization Plan No. IV under which several major units of the Department were transferred.

Phil Glick's past participation in certain legal phases of broad forest policy and planning have commanded the appreciation and admiration of the Forest Service, so we know our legal future will be in sympathetic and competent hands. But despite that fact, there are genuine pangs in the thought that we no longer can burst into Fred Lees' office, or call him on the phone, whenever we need legal guidance or advice. For more than thirty years he has been guide, counselor and friend to the Forest Service and all of its individual members; quick to point out legal pitfalls but equally quick to explore all legal means to attain objectives. In his quiet, cooperative, friendly way, he constructively has contributed to the development of forestry in the United States to a degree excelled only by a very few of the other men who have been associated with the movement. All foresters owe him a debt of gratitude. - L. F. Kneipp

THE EDITOR DISCOVERS

A summary of accident reports for the month of April 1940 for Forest Service CCC shows that the accident frequency rate for lost time and fatal accidents is 1.15 per 10,000 man days, or 2.58 per 1,000 enrollees, - the lowest rate thus far achieved with the exception of October, 1939, when this record was tied.

In January 1936 the rate was 10.0 per 1,000 enrollees.
In April 1936 the rate was 7.8 per 1,000 enrollees.
In April 1937 the rate was 4.8 per 1,000 enrollees.
In April 1938 the rate was 3.4 per 1,000 enrollees.
In April 1939 the rate was 2.9 per 1,000 enrollees.

In submitting the report to the Director's office, Fred B. Agee, as Acting Representative of the Department's CCC Advisory Council, said: "The CCC foremen deserve our sincere thanks and congratulations since it is largely their example, foresight, and care over boys who frequently do not think for themselves, that has resulted in this splendid record."

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"American Vacations" by Larry Nixon, recently published by Little, Brown & Company, was written expressly for Americans of moderate means who cannot afford luxury vacations. The book contains much information on how to plan for a vacation, what to wear, what to take, where to get it, and what it costs. Quite a bit of National Forest data are included, although, unfortunately, not all of it is strictly accurate. The publishers report it as one of their best sellers.

Mr. Nixon also has an article in the July issue of "The American Mercury" entitled "You Can Have A Forest Camp."

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The honorary degree of L.L.D. was bestowed on Henry Solon Graves by Yale University at commencement exercises on June 19. Presentation was made by Professor William Lyon Phelps, who read the following citation:

"Gifford Pinchot, Yale '89, became 'America's first professional forester.' Three years later Graves took his degree, and instead of entering politics, according to the label of his middle name, he took to the woods; which indeed has been the destination of some politicians. In 1898, Pinchot became chief of the small division of forestry in the United States Agriculture Department and Graves assistant chief. They saw that if the wholesale butchering of the Nation's timber resources was to be curbed two things were necessary: the government must fight it and scientific foresters must be trained in American schools. Dr. Graves left the government in 1900 to found Yale's School of Forestry. Dr. Graves remained at Yale until 1910, when he became chief of the United States Forest Service. He returned to Yale after ten years to be Dean and Sterling Professor of Forestry. His career illustrates exactly the opposite of a familiar proverb--you can't see the forest for the trees. If he had applied his scientific policy of production cutting, that is production through elimination, in the Garden of Eden, he would by the fall of a tree have prevented the fall of man."

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The June issue of "Natural History Magazine" contains a seven page layout of pictures and descriptive material on "Rarest Trees of America." The trees included in this display are Port Orford Cedar, Weeping Spruce, Redwood, Monterey Pine, Monterey Cypress, Bigtree, Bristlecone Fir, Torrey Pine, Bigcone Spruce, Corkwood, Florida Yew, Franklinia, and Stinking Cedar. These, the article says, "ten leading experts have voted our rarest trees. Many other trees, rare in the United States, extend over a larger range to the south, or else do not differ strikingly from commoner species. The trees selected do not grow anywhere else in the world. They have also been selected partly because of distinctive characteristics which make them recognizable and interesting." A number of the photographs and drawings used in illustrating the layout were furnished from the Forest Service collection.

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Secretary Wallace has announced the resignation of Dr. W. W. Alexander as Administrator of the Farm Security Administration and the appointment of C. B. Baldwin of Radford, Virginia, now Assistant Administrator of the Farm Security Administration, as Dr. Alexander's successor. Dr. Alexander has accepted a position as vice-president of the Julius Rosenwald Fund, with headquarters in Chicago.

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Newton B. Drury of California has been appointed Director of the National Park Service by Secretary Ickes. He succeeds Arno B. Cammerer who asked to be relieved of his duties because of ill health. Mr. Cammerer will remain with the Park Service in an advisory position. Mr. Drury has been Secretary of the Save The Redwoods League for a number of years.

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The following retired from the Service during the month of June:

Bert Mahoney, Fishlake, R-4
B. F. Vaughan, Ozark, R-8

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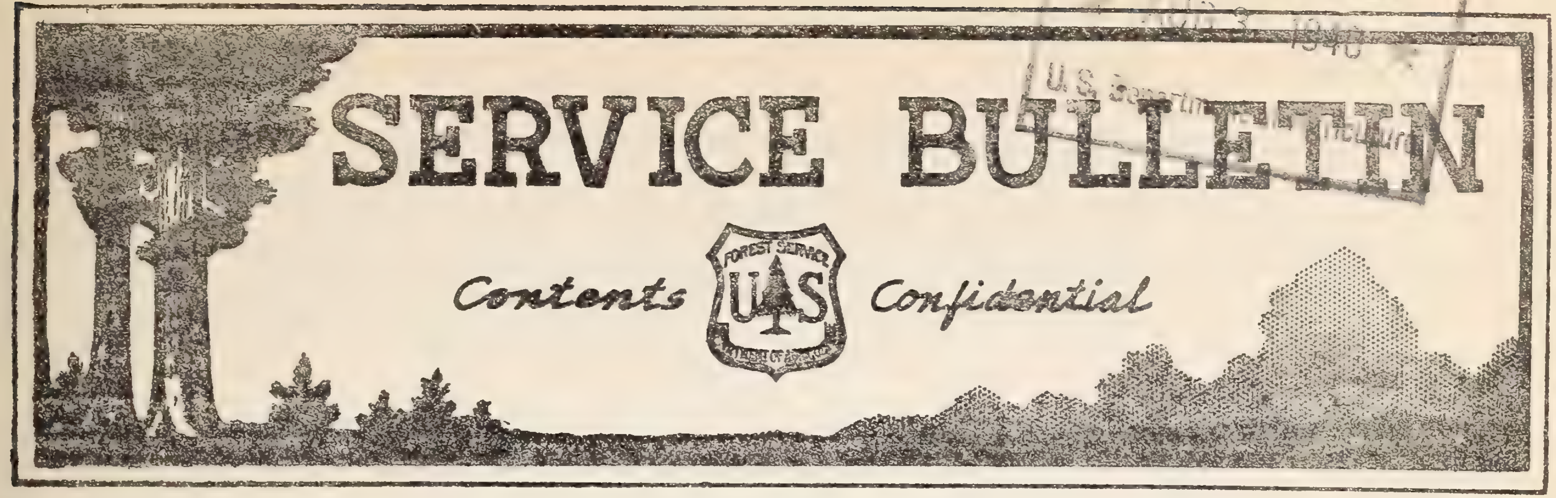

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 15 Washington, D. C. July 22, 1940

THE STRENGTH AND QUIETNESS OF GRASS

(Excerpts from an address by Secretary Wallace broadcast during the National Farm and Home Hour, June 21)

Uppermost in all our minds these days are tragedies and alarms that affect the whole world. We cannot escape the thought of these tragedies and alarms, and it is natural that we should think of other things in relation to them, and especially in relation to the future of the United States. So even when I think about the place of grass in our American agriculture, I find myself thinking in terms of the world situation and our own future.

I have always had a great affection for grass. It seems to stand for quietness and strength. And curiously, in that connection, an old story comes to my mind. You all know it - it is the story of Samson and Delilah. When Delilah by her blandishments at last persuaded Samson to have the heavy locks of his hair shorn off, Samson became a man without strength - for in those heavy locks lay the source of his power. Without them, he fell an easy prey to those who would destroy him.

As I think of this story, it seems to me that Samson stands for our American agriculture. It too is a giant in strength. And Samson's heavy mane of hair seems to me to stand for the thick green grass covering a countryside. A countryside shorn and stripped of this thick green grass, it seems to me, is weakened just as Samson was. An agriculture without grass loses a primary source of strength. Like Samson, it is in danger of falling a prey to destructive forces.

I believe the quietness and strength of grass should be, must be, permanently a part of our agriculture if it is to have the strength it will need in the future.

It is only recognizing the truth to say that in the past we have been lured by the Delilah of profits to destroy this grass covering recklessly. We have not understood what grass means as a source of strength for agriculture. We are only now beginning to understand. Millions of our people today are tree conscious but as yet only a few are grass conscious. A tree is easily seen; we think of it as an individual thing. A grass plant is small and humble, lost in the multitude, and unnoticed. Hardly one person in a hundred thousand realizes what is going on in the growth of grass. But for protection of the soil grass is just as important as trees - and for building a deep soil rich in humus, holding water like a sponge, it is much more important....

During this summer and fall a series of grassland conferences will be held in each of the five great regions into which this country can be divided from the standpoint of grass. These regions are the Northeast, the Southeast, the North Central, the West, and the Southern Great Plains. Agricultural scientists will get together at these conferences to work out ways and means of making grass as useful as it can be to our soil, our water supply, our livestock, and our people.

We are a little late in getting around to it, but I believe we can do things in grass breeding almost as significant as the things that have been done in corn breeding. Quite an amazing amount of scientific work has been done during the past five years. It is now known, for example, that probably hundreds of strains of bluegrass can be established, some with leaves three times as broad as others, some completely resistant to leafspot diseases that wipe out other strains during the summer. The same kind of thing is apparently true for other grasses besides bluegrass, and also for clovers.

This kind of information will be discussed in detail at the conferences, as well as information about fertilization, management, and so on. Each of our great grass regions has its own peculiar characteristics and problems - its own varieties of grasses - its own possibilities for making far better use of grass than at present. These regional conferences should be tremendously useful to farmers....

Everything we have been learning about grass tends to bear out what I said in the beginning. In a country like the United States, grass is a source of strength to agriculture, and therefore to the Nation. The more we fail to realize this, the more difficult it will be to maintain and build up our great agricultural resources and our soil resources - yes, and our human resources too. The more we think in terms of the world situation and the future of our country, the more important grass will become in our agricultural system.

THE CHOCTAWHATCHEE JOINS THE ARMY

By L. F. Kneipp, Washington

Back in the dawning days of the Forest Service somebody discovered that just north of Choctawhatchee Bay there were something over 100,000 acres of public domain supporting longleaf pine timber which somehow or other had escaped appropriation. Out of that discovery grew the Florida National Forest. It was the one area then under Forest Service control which supported species of pine suitable for the production of naval stores; consequently, it became the birthplace of Forest Service investigations in that field. Out of those investigations developed many notable improvements in naval stores practice. Out of the administrative complications of managing the forest developed a number of men who subsequently became somewhat notable in the annals of the Forest Service. Notwithstanding its very inferior site quality, the unit made many noteworthy contributions to the progress of forestry in the South Atlantic States.

Slowly the area was expanded by painstaking effort, first by series of exchanges, later by initiation of purchases under the Weeks Law. By these processes the area in Federal ownership was increased to 345,961 acres; leaving only 26,935 acres in private ownership. Meanwhile the simple name of "Florida" had been changed by proclamation to the jaw-breaking title of "Choctawhatchee."

Thus the matter stood at the beginning of the year 1940 A.D. Meanwhile new fashions in warfare had developed in other parts of the world. It had been found that an effective way to change the social and political philosophy of a country was to fly over it with airplanes freighted with high explosives, dropping the charges at the times and places they would cause maximum destruction. Not desiring to ignore the trend of the times the United States Army decided to do a little experimental work along the new lines.

There are, however, certain hazards connected with the flying of a plane loaded with a ton or so of high explosives over an intensively occupied area. The plane might crash, or bombs might slip from their racks, or when intentionally discharged might land elsewhere than on the target. Absolute control of a large area, with power to exclude civilian occupancy, seemed an indispensable requirement.

The Army searched far and wide with little success. Scantily occupied areas largely in Government ownership and of low productive value are not numerous. According to their findings the Choctawhatchee was the best available area. Meanwhile conditions had reached a stage where any impediment to the national defense was hardly thinkable. Facing the situation the Department of Agriculture gave its assent to the transfer and the Act of June 27 made it a legislative fact. The present hope is that in some happy future day when blitzkriegs are not fashionable the Choctawhatchee will again become a National Forest.

ENGINEERING ON THE NATIONAL FORESTS BY REMOTE CONTROL

By C. A. Betts, Washington

In this machine age it is well to know as much as possible about machinery; it is even desirable to keep in touch with the so-called "machinery" that operates our own organization.

Questions are continually coming in as to the work of the Division of Engineering, which seems to touch nearly all of the activities of the far-flung conservation program of the Service; questions ranging from why engineers are needed to locate a road when there were roads before there were engineers, to why high surveyor boots are worn. The work of the Engineering Division has been growing in volume and detail as more and more attention has been given to the beneficial use of all land and water resources. Its functions include not only mapping, surveys, road building, telephone lines, design and construction of bridges, buildings, fire towers, dams and other structures, development of water supplies, camp sanitation and power but also roadside erosion control, stream improvement, and other phases of water use which are deservedly receiving more attention than formerly. In short, the "application of the forces and materials of nature to the benefit of mankind," which is the chosen field of engineers, becomes increasingly complex in the administration of the forests as their use increases.

Less than a decade ago little use was made of our knowledge of the characteristics of soils and colloids. Soils were just dirt to engineers. Today the science of soils mechanics is being applied to the stabilization of road foundations and surfaces, earth fill dams and slides with amazing results at little cost. Concrete, which was almost unknown a generation ago, can perform wonders if properly handled. Mechanical equipment for construction and other uses has grown with the automobile industry. Even meteorology and hydrology are advancing at an unprecedented rate under the spur of aeronautics and flood control.

To effectively use this knowledge on the Forests it is necessary to have specialists in such major fields as hydraulics, structures, architecture, equipment, and photogrammetry. Comprised as it is of these trained specialists in ever increasing numbers of fields, the Engineering Division must pool its talents and lend them where they will do the most good. It is obviously impractical, for instance, to provide each Forest with an experienced bridge engineer although at certain stages in the development of that Forest the services of several experts may be required.

Along these lines it has become the practice of most large private engineering organizations to centralize their engineering staffs, thereby capitalizing the results of years of experience which has shown that men skilled as designers can develop speed and superior plans and specifications when they specialize and have the facilities of a well equipped office at their disposal. Engineers are sent out on the ground to gather necessary data, return to headquarters to prepare plans, and then keep in contact with the field until the job is completed. The concentration of the Bureau of Reclamation's large dam designing engineering staff in the Denver office and the centralized engineering force of the National Park Service and Soil Conservation Service are illustrations of this tendency in the Federal Government.

In a decentralized organization like the Forest Service where more than 100,000 people were given employment last year a great deal of special technical instruction must be given.

The reconciliation of the apparent conflict between the decentralized administration of the Forests for administrative purposes and the need for a certain amount of centralization in Engineering might at first seem insurmountable. It has been found, however, that a solution lies in the centralization of such services as map making, drafting, photography, and architectural designs, combined with decentralization of construction. In this way it is possible to send a standard storage tank design to 100 different Forests rather than have 100 different engineers working on the same tank design locally.

Liaison between the central office and the field is accomplished through so-called "inspection." Actually this is a misnomer in 75 percent of the cases where engineers go into the field from headquarters to render technical assistance or to obtain local data for design and not for inspection as applied to other Forest Service activities. Field trips by specialists from the Washington Office, Regional Offices, and, to a lesser degree, from the Supervisors' Offices, provide a close tie-in between design and construction and at the same time lay the foundation for future plans. A certain amount of inspection is an accepted necessity in all engineering work in order to assure compliance with the intent of plans and specifications, but this should not be confused with technical supervision and aid. In most cases there must be a follow-through from design to completion of the job, and, as a rule, the cost of the field trips can be more than balanced by savings resulting from professional advice given during the progress of the work.

Predicated on the assumption that "A man convinced against his will is of the same opinion still", the technician's objective must be to inform the field force as to the fundamental reasons for proposed procedure.

Last year over 50 percent of administrative expenditures in the Forest Service went for works of an engineering nature, such as surveys, roads, trails, structures, water developments, communications, and other permanent improvements. Considering the volume of work requiring engineering attention, the percentage of time spent in the field by engineers from the Washington and Regional Offices is comparatively small. It is only through close cooperation all along the line that it is possible to turn out the most useful work for the least money by remote control.

IVY POISONING

(Extract from statement prepared by Federal Inter-Departmental Safety Council)

Usually, the person who is sensitive to the poison must come into contact with the plant in order to have an attack of ivy poisoning. Many people who think they are so sensitive to the plant that they are affected even if they pass near it have actually come in contact with the plant without knowing it. The parts of the body most commonly affected are the hands and arms, the legs, and the face. The face is frequently affected because the fresh juice of the plant has been carried to it by the hands -- an easy and common means of transferring the poison in summertime when one is perspiring. Some people are more sensitive to the juices than others; they have more severe attacks, and it has been found that they can get ivy poisoning from handling shoes, tools, golf clubs, or tennis rackets which have on them the sticky juices of the plant....

There is no sure means of preventing ivy poisoning but there are several helpful preventive measures. Even though you know the plant and use every precaution to avoid it, you may come into contact with it sometime during the summer....

Here is a simple personal precaution that will help you avoid ivy poisoning at home and in vacation spots. Whenever you return to the house or the camp from an out-of-doors jaunt, scrub the exposed parts of the body with laundry soap or tincture of green soap. Do not touch your face or other parts of the body until you have scrubbed your hands, arms, and legs. Pay particular attention to the fingers and fingernails. Use a scrub brush that you keep for this purpose only. The usual toilet soap will not suffice. An inexpensive grade of green soap is just as effective as the more costly ones and could be used as a pleasant all-purpose toilet soap as well. Laundry soap is inexpensive, too, and is usually found in the house. Work up a good lather, scrub well, and be sure that you rinse thoroughly. If you suspect that you have been exposed to poison ivy, you might follow the scrub-up with a rinsing in a solution of baking soda, borax, boric acid, or Epsom salts.

An additional simple precaution to take if you know that you are going into a place where you will probably meet poison ivy, is to cover the exposed parts of the body with a protective substance before setting out. Cottonseed oil, olive oil, or vaseline applied to exposed parts afford some protection to the skin. These substances (and ointments) should never be used in home treatment of ivy poisoning; only as a possible protection. At the end of the day, the oil must be completely removed by a thorough scrub-up.

After a known contact with poison ivy, follow your scrub-up by painting the exposed area with a 5 percent solution of ferric chloride (half strength) or a 5 percent solution of ferrous sulfate. You can buy these at any drug store. This method of cleansing and painting with one of the solutions is very helpful, even after the first inflammation appears. Persisting with this practice will prevent the attack or greatly lessen its severity. Another preventive measure which many physicians recommend is to have injections of poison ivy extract or to take the extract by mouth....

Well, that's the preventive story. Suppose you have done all these things, and yet, here you are down with ivy poisoning! What to do! Are you sure it is ivy poisoning? The eruption is easy to confuse with other skin diseases. To use the wrong treatment may cause you more discomfort than do you good. However, continuing the preventive treatment we have previously described -- the scrub-up and painting with 5 percent solution of ferric chloride (half strength) or 5 percent solution of ferrous sulfate -- can do no harm, and may check the attack. After painting, let the solution dry and leave the affected parts exposed to the air. Do not put on a dry bandage. A mild case of ivy poisoning will usually subside under this treatment in a few days. But if the inflammation is extensive and severe, if there is much swelling and weeping, go to your physician!

FOREST RANGER COMMENTS ON "ROVING RANGERS OR TRANSIENT FORESTERS"

By Jesse I. Bushnell, Tonto

I found the article "Roving Rangers or Transient Foresters" in the April 15 issue of the Service Bulletin interesting though I did not entirely agree with the writers. Their version of our personnel policy is apparently based upon more or less special circumstances and does not represent my experience with Personnel Management, which I believe most rangers have found to be just and considerate in all transfers. This has been true in my own case and in those transfers of which I have had full knowledge of all conditions.

On May 1, 1940, I celebrated my 30th year in the Forest Service. Since my appointment on May 1, 1910, as Assistant Forest Ranger on the Coconino National Forest I have been transferred just four times. All of these transfers were made at my own request with the exception of one time when I was located on a timber sale that closed down operations for an indefinite period and it was, obviously, necessary to transfer me to another job. This was done satisfactorily and we remained at that location for 13 years, when it was desirable to transfer to a location where there were high school advantages. From there we moved to the Verde District on the Tonto National Forest, where we have been for nearly twelve years.

On one occasion when I was to be transferred several of the permittees on my district wanted to request the Regional Forester to keep me on the district, as they somehow had the impression that it was just another transfer. When I told them that I had requested the transfer they immediately dropped the idea. Of course, then as always, we regretted to leave old friends and familiar surroundings, but it was necessary on account of lack of school facilities. To offset this disadvantage there was the satisfaction and stimulation of taking up new problems on a new district, some, perhaps, that required impartial work, and, occasionally, a fresh, unbiased viewpoint.

It may be, or should we say it usually is, necessary to transfer a new man in the Service several times within the first few years. In fact, I can think of nothing that would be so devastating to ambition, achievement, and accomplishment than to feel that once one secured an appointment on a certain district he were there for life. (Did you read that series of articles by Ernie Pyle, well-known roving columnist, on the government employees in the Panama Canal Zone? Well that covers it.) First of all, it is up to the new appointee in the Service to take whatever vacant station may be available or where a vacancy may be arranged; second, it may be necessary to transfer him to a station or location more suitable to his qualifications; and lastly the ranger may desire, for various reasons, a different location or surroundings.

After all, when the Forest Service or Personnel Management is satisfied with a ranger's work, and the users are satisfied, a ranger may remain on one forest or ranger district as long as he desires.

SURVEYS AND MAPS MEETING

A meeting of the Chiefs of Surveys and Maps was held in Denver, Colorado, from June 24 to 29 inclusive. This meeting was attended by the Chiefs of Surveys and Maps of Regions 1, 2, 3, 4, 5, 6, and 8; the Chief Draftsmen of Regions 1, 2, 3 and 4; Mr. Lautz, Mr. Massie and Miss Helen Smith of the Washington Office; and Mr. Wright of the Technical Advisory Board.

The use of aerial photographs for range management, timber surveys, transportation planning, erosion studies and other forest activities, as well as for planimetric surveys, has increased materially in the past few years.

The purpose of the meeting was to discuss obtaining aerial photographs, establishing control for the photographs, and the preparation of a planimetric base. The methods as used in the various Regions were discussed for the purpose of making available to all Regions such information as may be used to advantage. - E. S. Massie

PAN AMERICAN GROUPS TO PROMOTE USE OF NATURAL RESOURCES

Plans for closer economic relationships among the 21 American Republics are taking concrete form in the establishment of three new inter-American Commissions for the better utilization of natural resources, according to a recent announcement by Dr. Leo S. Rowe, Director General of the Pan American Union.

Governments of the American Republic have been asked to name representatives to the new Commissions that will work on problems of rubber production, tropical agriculture and soil conservation, and will make an inventory of natural resources in both American continents. Recent establishment of the American Society of Agricultural Sciences has provided a new means of consolidating the abilities and efforts of technicians from all the American nations toward these ends.

"The move to establish these inter-American working groups may be noted as a rapid and concrete result of the recent Eighth American Scientific Congress," Doctor Rowe said. "Resolutions approved by the Scientific Congress, held in Washington in May, formed the basis of requests by the Pan American Union for official action by its member nations to set up the three Commissions."

In view of the present international situation, special interest is attached to the establishment of a Committee to organize an Institute of Tropical Agriculture and to promote rubber production in the Western Hemisphere. The governments of Brazil, Colombia, El Salvador, Guatemala, Venezuela, and Peru have been asked to name representatives to this Committee. Its function will be to work with both governmental and private agencies in developing practical demonstrations of rubber production in South and Central America.

As a companion project to the inventory of natural resources, there is being set up a Commission on Soil Conservation. Charged with the responsibility of promoting an exchange of technical personnel and information on the protection of soil resources, this commission will also encourage practical demonstrations of soil-saving measures in all American republics.

An important stimulating group in this movement for closer collaboration among the American Republics is the recently organized American Society of Agricultural Sciences, an outgrowth of the recent Scientific Congress. Ernest G. Holt, of the U. S. Soil Conservation Service, is President of the Society, and Jose L. Colom, of the Pan American Union, is Secretary General. Each of the 21 American nations will be represented on the council by a vice-president. Those already designated in this capacity are Dr. R. Alamo Ybarra of Venezuela, Dr. Jorge Ancizar-Sordo of Colombia, and Dr. Maneul Elgueta of Chile. It is expected that appointments from other countries will be made soon. - (From a Pan American Union Press Release)

IN DEFENSE OF THE FORESTRY PROFESSION

By R. C. Hall, Washington

"The Forests were set aside to accomplish a great National purpose, but their first and greatest service is to the local communities. This principle is fully recognized in the administration of the National Forests, as is shown in the policy of the timber sales, grazing, land classification, water-power development, etc., in which the first consideration is always given to the local communities and particularly to the small man in those communities." This statement might have been written yesterday, but it wasn't. It was contained in a memorandum transmitted October 23, 1914, to the Secretary of Agriculture by Chief Forester H. S. Graves. It is likely that similar statements were made by every Chief Forester from Pinchot to Silcox.

There is a tendency in current discussion of "social aspects" of forestry to accuse the profession of being prone to serve trees rather than people. A recent example is found in the third paragraph of Benton MacKaye's review in the June 10 issue of the Service Bulletin. This strange idea is strikingly belied in the same issue by the excerpts from Gifford Pinchot's address dealing with conservation and permanent peace. Nor does it accord with Graves' statement, which was "old stuff" to foresters in 1914.

Foresters often disagree as to how forests can be handled most effectively to serve human ends, but surely none have other ends in view. It is hardly credible that anyone would be interested in growing forests except for human welfare. If we have such foresters among us, just what is the goal of their endeavors? Is it to provide shade for mosquitoes or food for beetles? Or do they ascribe to trees a capacity for joy of living which it pleases them to indulge?

The underlying philosophy so well presented by Pinchot in his recent address, and by Graves in his statement of 1914, has not changed since the days when these pioneers talked to student foresters about the campfire and inspired them to think of forestry as a great undertaking for the good of humanity. If foresters then or later have either held or acted upon the principle of "folks for forests", no evidence to that effect has been brought to light. A spirit of humility is becoming to a young profession, but could be maintained with better grace if the prophets among us would hurl their anathemas at sins that are real rather than imaginary.

"CCC MEN OF AMERICA"

According to the press, a group of former CCC enrollees organized a local chapter of the "CCC Men of America" at Columbus, Ohio, on June 14. The program of the organization (which was formed before the present war) calls for cooperative employment placement, sports, and social events.

THE EDITOR DISCOVERS

At a recent staff meeting of the Southern Forest Experiment Station, Mr. Eldredge discussed a very interesting comparison which he recently made between the forest resources of Sweden as reported by the Swedish Forest Survey ("Sweden's forest resources according to the National Forest Survey carried out during the period 1923-29") and the forest resources of the States of Georgia, Alabama, and Mississippi. The area embraced in these three Southern States very closely approximates the total land area of Sweden, as shown in the following tabulation. As is indicated in the tabulation, there is a remarkable similarity in the forest acreage, percent of forest area, total timber volume, and the industrial drain from these two areas.

Sweden		Alabama, Georgia, and Mississippi	
Land area (acres)	101,300,000		99,600,000
Productive forest area (acres)	57,200,000		55,800,000
Percent forest	56.5		56.0
Total timber volume (cu.ft.) (4" and up)	42.4 billion	(5" and up)	47.0 billion
Sound-tree growing stocks (cu.ft.) (4" and up)	42.4 billion	(5" and up)	37.0 billion
Growing stock per acre (cu.ft.)	740		660
Total gross annual growth (cu.ft.)	1.4 billion		2.3 billion
Average growth per acre (cu.ft.)	25		40
Growth percent	3.3		6.1
Industry drain (cu.ft.)	.8 billion		.99 billion
		(Total drain including mortality 2.0 billion cu.ft.)	

It will be noted, however, that whereas the annual growth in Sweden is 1.4 billion cu.ft., in these three Southern States it is 2.3 billion cu.ft., or that the growth percent in the South is nearly twice that in Sweden.

Mr. Eldredge pointed out that these figures show that understocked, badly treated stands of these three States have a better average increment per acre than Sweden has after centuries of management. Eldredge also showed by silhouette diagrams that, considering the differences in rotation involved, the distribution of volume by age-groups in Sweden and in two typical Survey units in the South is markedly similar.

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During the five-year period ending with 1939, the Forest Service did not have a fire season that equalled the famous years of 1934, 1931, and the earlier years of the same type. From all indications, however, 1940 may be another history making "bad" fire year. Only summer rains in country where summer rain is not normal can keep the present year from qualifying along with other "bad" years of National Forest history.

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Headquarters of the Siuslaw National Forest were transferred from Eugene to Corvallis, Oregon, effective June 28.

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Competition among public and private travel promotion agencies is so keen that constant improvement in the methods developed to describe their various "attractions" is very noticeable. A recent example is "Valley Empire", which aims to boost attendance at the "Ski-Hi Stampede" at Monte Vista, Colorado, July 31, August 1 and August 2 and to attract tourists "to spend your vacation in the great San Luis Valley of Colorado and the Rio Grande National Forest." Of special interest to the Forest Service are several official pictures enlarged to the full page size of 10 x 13 inches and the way in which the various natural resources of the San Juan National Forest are portrayed as tourist attractions and local economic assets.

Contrary to the usual technique of printing captions on the same page, separate descriptive inserts are bound into a celluloid comb binder, thus making an unusually attractive, relatively inexpensive, and decidedly unique booklet in the form of a photo album that is something more than a "hand out."

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"Sunset rides on the mile-long chair ski lift are the latest thing offered visitors at Timberline Lodge," according to an item in a recent issue of the "Oregonian", Portland.

"Manager Arthur V. Allen," the item continues, "announced that the lift will operate daily during the summer months to take sightseers to the 'Sky Hut' at the head of the mile-long structure. The view from the 'Sky Hut' is considered one of the finest in the West."

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By order of June 13, Director McEntee laid down definite instructions to govern the type, size, arrangement and general format of all printed publications to be issued by any and all cooperating Bureaus and Departments which are paid for from CCC funds. These instructions are being issued as an amendment to the CCC Handbook.

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The following changes in National Park Service personnel have been announced by Secretary Ickes:

Arno B. Cammerer, formerly Director of the National Park Service, has been appointed as director of the Eastern region, with headquarters at Richmond, Virginia. Miner R. Tollotson transfers from directorship of the Eastern region to that of the Southwestern region, with headquarters at Santa Fe. Col. John R. White, now regional director at Santa Fe, transfers to San Francisco to take up duties as regional director of the Far West. Frank A. Kittredge, now regional director of the Far West, will become Superintendent of the Grand Canyon National Park, a position that has been vacant for several months.

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Gifford Pinchot writes Joe Santucci of the Washington Office as follows:

"I am delighted to get your letter of July 3 and to know of the beginning of your thirty-eighth year of continuous service. I congratulate you, and I congratulate the Forest Service. I only wish we were still working together. The best of everything to you, old friend."

LIGHT CUTTINGS IN HARDWOODS SHOW HIGH QUALITY INCREMENT

The advantages of light cuttings in increasing quality growth of the residual stand were brought out by the analysis of three of the experimental cuttings (light, moderate, and heavy) that have been in effect for ten years at the Upper Peninsula Experimental Forest. In the heavy cutting the growth was mostly on small saplings, in the moderate cutting it was distributed over quite a range of diameters, and in the light cutting growth was concentrated on large trees.

The extensive mill-scale studies carried on a number of years ago in connection with selective logging established a definite relationship between diameters of trees and value of the lumber per M feet cut from them. By applying these values to the increment obtained in the three types of cutting, the growth per acre per year was computed to be worth $4.25 for the light cutting, $2.67 for the moderate cutting, and $0.68 for the heavy cutting. These differences are further accentuated by the fact that the value given for the light cutting could be realized immediately if it were necessary to cut it, whereas that from the heavy cutting is scarcely realizable at all, since the stand is too poorly stocked to warrant returning for a second cut within a reasonable period. Despite the fact that the mill-scale values may be somewhat changed today, the relationships remain the same, and it is perfectly clear that the light cutting has given much the best results in quality growth. In order to gain the advantage of such quality growth the trees left should be relatively sound and free of defect. - (Technical Note, Lake States Forest Expt. Sta.)

GAME WARDEN SWAMPED BY COMPLAINTS AGAINST ALL TYPES OF WILDLIFE

(Clipped from "Baltimore Sun" of June 14)

E. Lee LeCompte, State Game Warden, looked on life with a jaundiced eye yesterday.

"It's hell if you do, and it's hell if you don't," he said disconsolately. "If you don't have any game, then the hunters complain; when you've got a lot of game, the public complains."

Warden LeCompte's troubles centered around the growing depredations of certain elements of the wildlife population under his jurisdiction. The squirrels, it seems, are gnawing at the roofs of citizens' houses; the rabbits are eating boulevards through flower and vegetable gardens; raccoons and foxes have been raiding the Eastern Shore muskrat marshes. And, to top the sorry tale, a band of Cecil County deer have just staged an unparalleled Blitzkrieg on a considerable area of Cecil County cabbage fields. Up in Garrett County rapidly increasing deer herds are eating gaps in the wheat fields. Washington county orchardists are in a justifiable lather because deer have been eating the succulent tips of fruit-tree branches.

"We're getting complaints every day," LeCompte said sadly. "Either it's squirrels or it's rabbits around Baltimore, or deer in somebody's cabbages. It's pretty discouraging."

He said one informant reported seeing sixty-two deer in one Washington County orchard. A herd of between fourteen and twenty was believed involved in the Cecil County cabbage case.

So far as the smaller animals are concerned, LeCompte explained, the department can set traps, catch the game alive, and move it into game reservations. But the deer present a knot-tier problem which thus far has defied solution. Then, too, the department has received so many squirrel complaints it can't handle them. Under State law, citizens are prohibited from killing any game out of season.

HOWARD F. WEISS

Howard F. Weiss, the second Director of the Forest Products Laboratory, died suddenly last week. He had taken his car and gone off for a few hours fishing. When he did not return, a couple of his old friends who knew where he was liable to go went to search for him. They found him sitting on the bank of a favorite stream with his back against a tree, his rod by his side, and a smile on his face. He passed on peacefully and quietly as he would have wished to go when his time came.

As the second Director of the Laboratory, Weiss left an enviable record. He not only had ability and knew where he was going but took a human interest in everybody at the Laboratory and built up a splendid esprit de corps. When he left the Laboratory to enter the business world, he was equally successful both from the material standpoint and in his far-flung and widening friendships. A fine character has gone on - one with whom it was a privilege to have been associated.

While at the Laboratory Howard made a specialty of wood preservation. He wrote a thoroughly usable book about it and was made an honorary member of the American Wood-Preservers' Association. The foundations of the present authoritative position of the Laboratory in the field of wood preservation were laid by him. Much of his time after leaving the Forest Service was devoted to developing and putting on the market a number of products. One of the most successful of these was "balsam wool" - a widely used insulating material made from wood. - H. S. Betts

A THIRD OF A CENTURY OF USEFULNESS

Harry C. Turner, the nurseryman who had been on the job longer than any other in the Forest Service, passed away on July 5. The Forest Service has lost another loyal "old timer" whose lot in life was to struggle with what seemed to be "the worst first" in Forestry. From April 1, 1907, to July, 1940, he worked at one tough nursery after another, growing trees for planting on tough sites. Those included Fort Bayard on the Gila in New Mexico, the Bessey in Nebraska, and the Beal on the Huron in Michigan. He knew from experience what the vagaries of the weather can do to the best of plans for nursery production and for planting, but he refused to let those experiences daunt him.

A number of the devices now commonly used in our nurseries were originated by Turner, using junk or salvaged materials for his first demonstrations. Lately he had been developing a machine that bids fair to reduce the labor and cost of transplanting. But his real monument consists of the acres of trees that started under his watchful eye, were guarded against the many infantile perils that beset seedlings, and were so developed that they could put up the best fight possible when planted out to take care of themselves. "He did something worth doing, and like the doing of it." Vale! - E. E. Carter

SUCUPIRA WOOD GAINS POPULARITY

"A new wood, known as sucupira, is becoming increasingly popular, according to reports from Rio de Janeiro, Brazil, and is being used for bedroom furniture, chairs, tables, lampstands, wainscoting, partitions and office furniture," says Mississippi Valley Lumberman, June 21. "It is a reddish-brown wood with pencil-stripe grain and can be used for veneer although it is quite heavy and not as easily worked as maghogany. During the last few weeks its price has raised from less than 2 cents to 2½ cents per board foot, f.o.b. Rio, and it is believed that if it had not been for the war, sucupira would have wrested the export market from rosewood." (USDA "Daily Digest")

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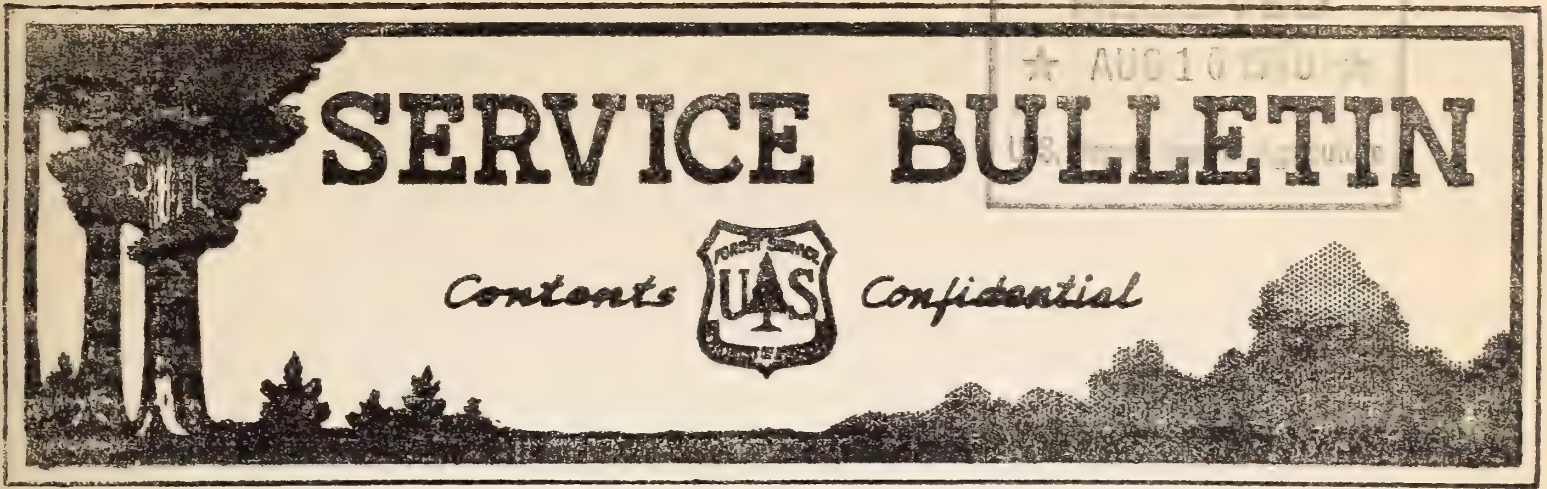

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 16 Washington, D. C. August 5, 1940

EARLY HISTORY OF THE CONSERVATION MOVEMENT

(Extract from an Address by Gifford Pinchot, at the Eighth American Scientific Congress, Washington, D. C. May 11, 1940)

Thirty-two years ago there was held in the city of Washington a conference which was the first of its kind. It was the first not only in America but in the world. It was also the first conference in the history of this country of the Governors of all the States and Territories with the President of the United States. Since it included also the Congress, the Cabinet, the Supreme Court, scientific experts, representatives of national associations, and outstanding citizens, it was one of the most distinguished gatherings ever brought together in this country.

But no one of these was the essential reason for its epoch-making importance. The reason why the meeting of the Governors with President Theodore Roosevelt in the White House in May, 1908, may well be regarded by future historians as a turning point in human history, the reason why it exerted and continues to exert a vital influence on the United States, on the other nations of the Americas, and on the nations of the whole world, is this: It was called to introduce, and it did introduce, to mankind the newly formulated policy of the Conservation of natural resources.

Even at that time the profound significance of Conservation was beginning to make itself felt. In announcing his intention to call the Conference, the President said: "The Conservation of natural resources is the fundamental problem. Unless we solve that problem it will avail us little to solve all others. * * * It (the Conference) ought to be among the most important gatherings in our history, for none have had a more vital question to consider."

In his opening address to the Conference the President made this striking statement: "So vital is this question, that for the first time in our history the chief executive officers of the States separately, and of the States together forming the Nation, have met to consider it. It is the chief material problem that confronts us, second only—and second always—to the great fundamental questions of morality. . . . This Conference on the Conservation of natural resources is in effect a meeting of the representatives of all the people of the United States called to consider the weightiest problem now before the Nation."

This Conference set forth in impressive fashion, and it was the first national meeting in any country to set forth, the idea that the protection, preservation, and wise use of the natural resources of the earth is not a series of separate and independent tasks but one single problem. As the President said: "The various uses of our natural resources are so closely connected that they should be coordinated, and should be treated as parts of one coherent plan."

The Conference asserted that the Conservation of natural resources is the one most fundamentally important problem of all. It drove home the basic truth that the planned and orderly development of the earth and all it contains is absolutely indispensable to the permanent prosperity of the human race. It spread far and wide the new proposition that the purpose of the Conservation of natural resources is the greatest good of the greatest number fo the longest time. And it taught the people of the United States, and other peoples, the new meaning of the word Conservation, which in its present application to natural resources was then generally unknown.

By defining, describing, and making known the new word and the new policy, by endowing it with the approval and support of the leaders of all the States, of the great industries, and of the Nation itself, the Governors' Conference put Conservation in a firm place in the knowledge and the thinking of the people. From that moment Conservation became an inseparable part of the national policy of the United States.

It is worth mention that this brilliant example of national foresight occurred not in a time of scarcity, not in a depression, but in a time of general abundance and well-being. The unanimous declaration of the Governors ended with this discerning admonition: "Let us conserve the foundations of our prosperity."

The Conference of Governors recommended and was followed by the appointment of Conservation Commissions by a majority of the States, and of the National Conservation Commission, which latter in January of 1909 submitted to the President the first national inventory of natural resources ever made. In February of the same year the North American Conservation Conference, the first international conference to consider the policy of Conservation, met in Washington at the invitation of President Theodore Roosevelt.

In his address at the opening of the Conference in the White House the President made this highly significant statement: "In international relations the great feature of the growth of the last century has been the gradual recognition of the fact that instead of its being normally to the interest of one nation to see another depressed, it is normally to the interest of each nation to see the others elevated..... I believe that the movement that you this day initiate is one of the utmost importance to this hemisphere and may become of the utmost importance to the world at large."

The North American Conservation Conference declared that the movement for the Conservation of natural resources on the continent of North America "is of such a nature and of such general importance that it should become worldwide in its scope." Therefore it suggested to the President "that all nations should be invited to join together in conference on the subject of world resources and their inventory, Conservation, and wise utilization."

What the Conference thus recommended was, however, already under way. The President had foreseen that the North American Conference would be the precursor of a world conference. Accordingly, to quote Elihu Root, then Secretary of State: "By an aide-memoire in January last [1909], the principal governments were informally sounded to ascertain whether they would look with favor upon an invitation to send delegates to such a conference. The responses have so far been uniformly favorable, and the conference of Washington has suggested to the President that a similar general conference be called by him. The President feels, therefore, that it is timely to initiate the suggested world conference for the Conservation of natural resources, by a formal invitation."

Secretary Root continued "As was said in the preliminary aide-memoire 'the people of the whole world are interested in the natural resources of the whole world, benefited by their Conservation, and injured by their destruction. The people of every country are interested in the supply of food and of material for manufacture in every other country, not only because these are interchangeable through processes of trade but because a knowledge of the total supply is necessary to the intelligent treatment of each nation's share of the supply.' ..... Reading the lessons of the past aright it would be for such a conference to look beyond the present to the future."

These statements make it evident that the President and the men in whose minds the plan for a world inventory was born regarded the proposed conference only as a first step. They believed that international cooperation between nations for the Conservation of natural resources and for Fair Access to necessary raw materials would greatly reduce the danger of war and work powerfully for permanent peace. Such a result was a definite part of their plan.

With the concurrence of the Netherlands, invitations were sent to 58 nations to meet at the Peace Palace in The Hague in September, 1909. Thirty of the nations, including Great Britain, France, Germany, Canada, and Mexico, had already accepted when President Taft, who succeeded Theodore Roosevelt on March 4, 1909, killed the plan.

Two attempts have been made to revive it. At the end of the World War President Wilson, at the suggestion of Colonel House, took steps toward securing world-wide cooperation in the Conservation and distribution of natural resources. Unfortunately nothing came of it. During President Hoover's Administration a group of nearly two hundred leading citizens from all parts of this country urged him in a public petition to take action along the same general line. Again nothing came of it. But these checks notwithstanding, the Conservation problem remains the fundamental human problem. Without natural resources no human life is possible. Without abundant natural resources civilized life can neither be developed nor maintained.

THE CHOCTAWHATCHEE --- 1908-1940

By Joseph C. Kircher, R. 8

(In the last issue of the Service Bulletin, L. F. Kneipp reported the transfer of the Choctawhatchee to the War Department under an Act of Congress approved June 27. In the following article Mr. Kircher tells the interesting history of this Forest. - Ed.)

On a bright, sunny morning late in October, 1913, two members of the Forest Service set sail from Pensacola in a small launch for Garniers, Florida. They had waited a whole day in Pensacola for this boat which was the only regular mode of transportation to Camp Pinchot, at that time the Supervisor's summer headquarters for the Choctawhatchee Forest. It ran three times a week to deliver mail and express to Garniers and other fishing villages along the Choctawhatchee Bay.

At Garniers the men were met by the Forest Service "navy" - a little bit of a boat with an engine that worked sometimes - and transported to Camp Pinchot. And here on the dock to meet the travelers were Eli Eldredge, the Supervisor, and his only Ranger, E. R. McKee. Many folks in the Service remember both of them, Eldredge in charge of the Southern Forest Survey and "Mac", who has retired after many years of efficient service and is living at Pensacola. So it was "hello Sam and Joe", and "we're so glad finally to have arrived, Eli." This was my introduction to the Choctawhatchee, though not to Eldredge, its first Supervisor, with whom I had wandered in the forests of the Southwest.

The Choctawhatchee, which had been withdrawn from the public domain in 1906 and proclaimed a National Forest in November, 1908, was then a part of Region 3 - in fact, its outlying province, which few members of the Region ever saw. It was, at that time, the only forest in the South, and had been attached to Region 3, which had headquarters at Albuquerque, New Mexico, the closest one, when the Regions (then called Districts) were created in 1908.

And so it fell to my lot, as an inspector in timber management in Region 3, to look over the sales and turpentine permits on the Choctawhatchee in 1913 just before it was to be transferred to the newly-created Region 7. At Pensacola I ran into Sam Dana, then in charge of planting and silvics in the Washington Office, now Dean of the Michigan Forest School. Together we proceeded to Camp Pinchot and then out onto the Forest, where we inspected sales, turpentining, and some very interesting plantations.

Even though the Forest had then been under administration less than five years, considerable progress had been made in protecting and developing it, under the able leadership of Cap. Eldredge. A lookout and phone system had been installed, and a good start had been made in fire control on this area which heretofore had annually and entirely burned over. Plantations of maritime pine and cork oak had been established and looked promising (but later on, as they grew older, they failed). A timber management plan was in operation, trespass had been nearly stopped, and a flourishing sale and turpentine business, which even in 1913 brought in $16,000 had been built up. There were under way, also, those studies in naval stores practice which, to a large extent, laid the foundation for present-day best woods practices. Roads there were none, because the auto had not yet found the Choctawhatchee, and Forest Officers did their work on horseback. Yes, a few sandy wheel ruts made by the gum wagons, and some equally sandy trails gave access to the various operations and allowed one to find his way about in a slow and laborious manner.

This, then, was the progressive start made by Eldredge, the young, active, versatile Supervisor. And the Choctawhatchee saw a steady development under his six successors - L. L. Bishop, W. F. Hill, A. C. Shaw, Sam Broadbent, C. G. Smith, and Frank Albert.

The year 1940 saw the Forest fully developed - the capital investments completed, fires under excellent control, timber being cut under a good management plan, recreation and wildlife developed and the Forest doing a $53,548 business. The Choctawhatchee "had arrived." It was a going concern - a successful timber farm which was a source of income for a good many people along Choctawhatchee Bay. On it also had been developed most of the present-day turpentine practices, so that it can be said that no other area of longleaf pine has had the influence on the naval stores industry that this Forest has. Financially, it had returned to Uncle Sam over one-half million dollars, and, of course in labor, many times more to local people. Truly, it had become one of the great and famous National Forests.

Then suddenly, on June 27, 1940, its existence came to an end when President Roosevelt signed the Act transferring it to the War Department to be used for bombing practice. Now, after 32 years of development of its resources, the Army moves in with bombing from airplanes and with other war practice which will lead to devastation of large areas. Fortunately, the Army expects to continue fire control.

So then as we part and wish you luck, we say "good-bye", Choctawhatchee - you have served us well as a fine example of conservation and as the father of modern turpentining. If you will serve your new master as well, you will earn added fame as a laboratory for national defense. And if at some future time man becomes sufficiently civilized to give up developing "engines of destruction", we will welcome you back to the fold, bandage your wounds, and cover your battle scars with a much finer growth of trees than you have ever had before. Till then -- do your duty, "so that Democracy may not perish from this earth!"

REDEEMING OUR RESPONSIBILITY

By J. A. Fitzwater, Washington

The Secretary of Agriculture recognizes the Forest Service as the Department's subject-matter specialist on forestry. Some of us occasionally wonder whether we are fully redeeming this responsibility which the Secretary has placed with us. It is true that the field in which we can be of the most service to other Departmental agencies, as a rule, lies well outside National Forest boundaries and that, therefore, there is always the question of availability of personnel. One of our best opportunities for service is probably with the Soil Conservation Districts, since with few exceptions the growing and care of trees can and should be an eminent part of over-all farm planning. Too often agronomy plays such an important role in this planning that there is a tendency to squeeze forestry out of the picture; this is particularly true where the control of wind action is the major factor in soil stabilization.

This spring work programs and plans for two Soil Conservation Districts in North Dakota were submitted for review to the Prairie States Forestry Project. The comments furnished by Dave Olson in returning them to the regional supervisor strike me as being particularly meaty and illustrative of an instance in which we are fully redeeming our responsibility.

Director Roberts in submitting Mr. Olson's comments to Washington stated: "We have felt for sometime that the presentation of the recommendation of forestry was invariably weak or sketchy as compared to presentations of other types of soil conservation programs for these Soil Conservation Districts. Foresters of the various agencies working with these programs were agreed and when the two programs and work plans of the Wells County, and Walsh County Soil Conservation Districts were received it was decided that foresters as a whole... should make a determined effort to place their recommended programs more definitely in the picture and not permit a preponderance of other types of work in the Soil Conservation District to submerge forestry beyond its balanced relationship to the program as a whole.

"Olson attended a meeting in North Dakota called by the State Coordinator to discuss these proposed amendments. No difficulty was encountered in getting the group to pass upon them..... We do not know as yet whether the amendments have been finally approved and incorporated but believe that they will be... We have considerably strengthened the presentation of forestry in these two particular District plans and believe that it has established a precedent that will be helpful in the development of future district plans."

Excerpts from Mr. Olson's comments follow:

"The following is presented as a follow-up of our recent conference and as a brief resume of suggestions which we believe to be applicable, especially in the case of the North Dakota program and work plans.... It is felt that the plans should include adequate consideration of the assistance which may be available from the several agencies interested in farm forestry in that part of North Dakota including Clarke-McNary, Mandan Station of the BPI, 1940 ACP forestry provisions, the facilities of the Extension Service and the State Forester and his organization, your Service, and others, as a means whereby the farmers may secure planting stock for such plantings and establish them successfully. Surely the Extension Service, the State Forester, and the Mandan Station of the BPI ought also to take part in the preparation of farm forestry recommendations.

"It would seem there are several distinct types of woodlands which should receive first consideration in these North Dakota counties. These include:

"(1) Existing Native Woodlands

"These are perhaps adequately covered with the exception that, if possible, more emphasis might be placed upon the methods that may be followed in improving these woodlands. The only recommendations made in the work plans are those which concern grazing. Are there not additional possibilities for improving these woodlands, such as selective thinnings, removal of wolf trees, possibly undesirable species, diseased trees, etc., and underplanting of desirable species?

"The plan speaks of regulated grazing only where erosion is a factor. I believe you will agree that livestock should be excluded or grazing at least carefully regulated in all groves as a good and necessary forestry practice to protect the stand of trees.

"(2) Areas to be Retired from Cultivation

"Mention is made of the possibility of planting such areas to forest trees and shrubs. This phase of the program might be enlarged upon and especially wildlife values from such plantings emphasized.

"(3) Farmstead Windbreaks

"In the plan, farmstead plantings are treated rather casually. These are perhaps more important to the farmers in the North than any type of farm planting, providing protection to the home and livestock and accumulating snow moisture for the truck garden. Practically nothing is said regarding the extension and improvement of this valuable part of farm forestry. Mention is made of the fact that some improvement and rejuvenation may be effected in the older farmstead plantings, but it is believed the plan should include a very definite program directed toward the establishment of new farmstead windbreaks.

"(4) Farm Woodlots (other than those covered in 1, 2, and 3)

"In most respects the purposes of plantings of this type would be met by existing woodlands, rough areas which might be planted to trees, farmstead windbreaks--especially those of larger size, and multiple-use field shelterbelts. Farmers in this area certainly have a need for fuel, fence posts, and the other values which may accrue from a farm woodlot, and my point is that upon those farms where the economic benefits to be derived from wood products are not met under one of the above four classes recommendations should be made for the relatively small amounts, specifically needed for woodlot purposes.

"(5) Field Shelterbelts (including both basic and intermediate plantings)

"Naturally, we are particularly interested in the manner and methods in which field shelterbelts are treated in these work plans and programs. It is definitely stated in both instances that the control of wind erosion is the major problem which is facing both Districts. It is likewise pointed out that wind erosion may be checked or controlled through the use of structures which actually form a barrier to the wind. This is clearly brought out in the frequent statement regarding the use of buffer strips consisting of four or five rows of tall-growing plants such as corn or cane. In spite of these facts, the conservation plan for these Districts seems to minimize the value of field shelterbelts as a means of checking wind erosion. The value of strip cropping and the use of buffer strips of tall-growing annual crops as a means of checking wind erosion in a particular field is not questioned, but foresters see the same mechanical benefits greatly increased and made more permanent through the use of a pattern of protective shelterbelts.

"The comments made by your Agronomy section questioning the use of intermediate or buffer plantings on the grounds that moisture requirements offset possible value were rather surprising. I am sure the preponderance of scientific evidence does not support that statement. The work of Bates and others of the Lake States Experiment Station, the Canadian workers, and others provide ample proof of the value of such plantings, particularly when considering values from the standpoint of wind erosion....

"In the following it is attempted to briefly review certain recommendations which we believe should be included in the work plans and programs for these two Soil Conservation Districts. You will recognize the need for uniformity in tree planting programs by the Department, and I think both the Soil Conservation Service and the Forest Service would be justly open to criticism if the forestry activities of the two agencies in the Department proceed along different lines in the same localities. Perhaps my recommendations will at least provide a starting point from which we can develop somewhat more uniform procedure.

"Basic Shelterbelts: On this Project we believe that a successful field shelterbelt serving all of its multiple purposes is obtained by employing certain numbers of rows of trees and shrubs, each having a definite place and providing equally definite values. The type of planting which we have in the past considered most desirable for such use is the 10-row shelterbelt. At present we are using a spacing of 10 and in some cases 8 feet between rows, with isolation strips of not less than 10 feet. This makes such a basic planting approximately 7 rods in width, occupying 14 acres to each mile of planting. However, we have recently revised our policy with respect to the type of basic plantings, primarily because we are convinced of the soundness of a farm forestry program which fits the type of planting to be made to the actual forestry requirements on the individual farm. We recognize that certain other features, especially those pertaining to multiple use values, may already be partially or wholly supplied by other farm woodlands already in existence or included in contemplated plans. Therefore, we recommend that basic field shelterbelts consist of from 5 to 10 rows of trees and shrubs, with the planting of fewer rows confined to those farms where soil and moisture conditions indicate favorable tree growth and improve our chances of securing an effective wind barrier.

"In addition, these plantings having fewer rows of trees are planned on those farms where the principal need for trees is for a protection planting, in which cases, multiple use values such as wood products are not wanted or are being supplied or planned for from other types of plantings. While a purely protective planting might be secured from even fewer rows, we believe that these plantings which form the basic portion of the completed pattern should not be less than five rows in order that we can provide for early protection through quick growing trees and long life of permanence through the use of slower growing intermediates and conifers. We intend to cooperate in the establishment of these narrow plantings only in those cases where the farmer fully understands that such plantings are being made only for protective purposes and that they will be somewhat less desirable than the plantings containing more rows, since the latter have certain definite advantages, particularly those of greater permanence, opportunity for regeneration, greater density, more protection against losses, and multiple use values. Between the 5 and 10 rows, additional rows will be added according to the desire of the farmer for the values which each will provide.

"Orientation of Basic Planting: We recommend that basic plantings be located along the south side of a section and in an east-west direction on the quarter line. Considering all angles, I believe that this orientation is most desirable and if practiced on a community basis will give ample protection both from the northwest and southwest winds. In individual or isolated cases some exception to the general plan of orientation may need to be made.

"Intermediate Plantings: We consider intermediate or 'buffer' plantings a very necessary part of the shelterbelt pattern, and intend to assist farmers in making a number of such plantings, confining our activities to those areas already having a heavy concentration of basic field shelterbelts, further limiting such plantings to farms where such basic structures have already been planted in order to avoid overburdening the farmer with cultivation and maintenance work. However, in critical areas where soil blowing is severe, I see no serious objection to the immediate application of a completed pattern of shelterbelt protection consisting of both basic and intermediate plantings to individual farms or groups of farms when there is reasonable assurance that the cultivation load can be carried.

"We had not contemplated the inclusion of this phase of shelterbelt planting in our plan of the current year for Walsh and Wells Counties, preferring to restrict the somewhat limited amount of work we expect to accomplish to other sections having a more concentrated pattern of basic belts.

"We consider the 3-row intermediates most satisfactory. When composed of a shrub, a sturdy intermediate preferably of a bushy type, and a high tree, they most nearly approach our ideal requirements. Intermediate plantings of such composition provide a fairly dense structure and at the same time will attain considerable height. Adequate protection will be obtained under most conditions when plantings are spaced at one-quarter mile intervals, or half way between basic plantings. The pattern would be further completed by the addition of cross-belts of three to five row structures located every half mile at right angles to the basic and intermediate plantings.

"The above points have been presented in a rather general way. It is hoped they may be of assistance to you, and we shall be glad to discuss them further in the event that you desire additional details or amplifications."

The manner in which this particular situation has been handled is commendable; it frankly points out the need for more consideration being given to forestry and does it in a constructive way, yet leaves the door open for further discussion. We no doubt are experiencing similar problems in our contacts with county planning committees, A.A.A. local committeemen and FSA. regional officers, and farm supervisors.

PARTY PLANKS ON CONSERVATION

"We pledge ourselves: To conserve the soil and water resources for the benefit of farmers and the Nation. In such conservation programs we shall, so far as practicable, bring about that development in forests and other permanent crops as will not unduly expand livestock and dairy production....

"To continue the broad program launched by this Administration for the coordinated development of our river basins through reclamation and irrigation, flood control, reforestation and soil conservation, stream purification, recreation, fish and game protection, low-cost power and rural industry." — From Democratic Party's Platform.

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"We shall promote a national land use program for Federal acquisition, without dislocation of local tax returns, or non-productive farm lands by voluntary sale or lease subject to approval of the States concerned; and the disposition of such lands to appropriate public uses including watershed protection and flood prevention, reforestation, recreation, erosion control, and the conservation of wildlife." - From Republican Party's Platform.

UNCLE SAM'S BLITZKRIEG

By Charles Arment, Tahoe

The fast flying plane roared over the front, banked in a wide curve, and from it dropped small dark objects which, upon descending, blossomed into large mushrooms floating down in the breeze. Parachute jumpers and equipment! Here one with a small radio makes a set-up and radios G.H.Q. that the parachutists are advancing to the objective.

Meanwhile, a tank division has started out from behind the lines in a pincer movement to give support to the parachutists maintaining contact by radio on the front line action. Heavy resistance retards the tanks in the form of billowing smoke screens layed down by the enemy along the whole front.

The forces are consolidated along the front now, and the infantry bring their power flame throwers into action. The terrific heat pushes the front back on the enemy; and as they give ground the tanks move in fast and mop up the stragglers. As the flame thrower division moves in, the enemy's resistance keeps breaking; and finally the tanks break through for a complete rout and final destruction of the opposing force.

This is modern warfare carried out by Uncle Sam: not man against man-- destroying, but man against fire--conserving.--(From the "California Ranger")

SOUTHERN STATES COOPERATIVE FOREST FIRE CONTROL CONFERENCE

By A. B. Hastings, Washington

Camp O'Leno, near Lake City, Florida, during the week June 3-7, was the scene of a meeting of real significance for forestry in the South. There were gathered the men in charge of the State forest fire control work in nine Southern States together with the U. S. Forest Service men immediately concerned with State forestry problems, making a total of about 25 active participants.

Camp O'Leno made a fine place for this meeting with simple living far from outside distractions where the men concentrated upon the problems at hand. The project was originated and carried through by the S & P men of Region 8 with the full cooperation of the State foresters in the South. The conference method was followed with subjects carefully programmed and assignments made well in advance of the meeting. The Florida Forest and Park Service made excellent hosts with State Forester Baker on hand throughout most of the week.

One day was devoted to demonstration of equipment for firebreak and fire-line construction. In addition to tractors and plows several different types of tank trucks and power pumps were demonstrated. A special Arkansas garden tractor plow, assembled for $375 and easily operated by one man on foot, attracted much attention.

During the course of the meeting the policies and methods employed by each of the States in preventing and suppressing forest fires were fully explained. Each fire chief saw how the other fellow was trying to solve his problems and took home for later study and application the new ideas which held the most promise.

A strong recommendation was made that the U. S. Forest Service produce at least one new film for the South each year, which shall include both the strictly educational type such as "Pine-Ways to Profit" and the human interest story type illustrated in "Pardners."

Definite plans have already been made for another similar conference for 1941.

TIMBER BUSINESS, F.Y. 1940

The value of timber cut on National Forests in F.Y. 1940 broke all records, $4,806,728. The previous high was $4,789,803 in F.Y. 1930. The 1940 figure includes $981,900 cut in exchanges, while in 1930 the cut in exchanges was valued at less than half that amount, $449,381. Consequently the value cut in sales and the cash receipts were not records, although receipts from timber, including products and trespass, were $1,092,940 greater than in F.Y. 1939 and amounted to $3,871,352.

All of the Regions except Regions 2 and 5 had increases in receipts. Regions 8 and 9 continued their remarkable increases in timber business handled. Region 8 is now firmly established in second place in timber receipts and value cut, and in third place in volume cut. The California Region cut a larger volume than the Southern but it was worth less, and used so much of its cut to pay off exchanges that it is fifth in cash receipts. Region 9 more than doubled its business, and passed Region 4 in receipts and value cut. The Eastern Regions, with relatively small net acreages but good accessibility, with little old growth timber but relatively strong local markets, keep gaining on the Regions west of the Great Plains. What they will be doing when their growing stock approaches normality can only be guessed, but obviously the relative importance of the Regions as timber producers will change markedly. - E. E. Carter

PROVISIONS OF NEW AMENDMENT

By Reed H. Jensen, Washington

Under the provisions of an amendment approved August 4, 1939, to the Civil Service Retirement Act an employee within the purview of this law may now: ". . . deposit additional sums in multiples of $25 but not to exceed 10% per annum of his annual basic salary, pay, or compensation, for service rendered since August 1, 1920, which amount together with interest thereon at 3% per annum compounded as of June 30 of each year, shall at the date of his retirement, be available to purchase. . . in addition to the annuity provided by this Act, an annuity according to the experience of the Civil Service Retirement and Disability Fund . . ."

Prior to this amendment the Retirement Act provided only for enforced savings of a specified percentage of salary. Under the foregoing amendment the act is broadened to permit the interested employee to supplement this enforced savings account (at present 3½%) with voluntary deposits, thereby augmenting the amount to his credit in the Retirement Fund which, upon his retirement, will result in an increased annuity to the extent purchasable from the accumulated voluntary deposits, including interest thereon.

As a condition precedent to the privilege of making voluntary deposits under the foregoing amendment, the Civil Service Commission has issued the following regulation: "No voluntary contributions shall be accepted from an employee who has failed to redeposit a refund previously made to him under the Civil Service Retirement Act and/or who is otherwise indebted to the Civil Service Retirement and Disability Fund." This ordinarily affects only those who are reemployed in a position subject to the Retirement Act after having been separated from such a position with refund of the amount to their credit in the Fund. Such employees (and others who for any reason may be indebted to the Fund) must first repay their indebtedness before being eligible to make deposits under the 10 percent privilege.

"Red tape" in handling and accounting for voluntary deposits has been reduced to a minimum. Unlike the mandatory 3½ percent contributions automatically withheld from salary payments, the voluntary deposits may not be accomplished through pay roll deductions. Instead, the employee deals directly with the Civil Service Commission, which has prescribed a system which functions briefly as follows:

The employee desirous of making voluntary deposits must make application to the Commission on its Form 3471, which may be obtained from the Regional Fiscal Agent, but which upon completion is to be sent by the employee directly to the Civil Service Commission, Washington, D. C. Upon approval of this application the Commission will furnish the employee an account book (Form 3472) containing 25 deposit slips and an identifying membership number. After receipt of Form 3472 (which is evidence that the employee's application has been approved) the employee may make deposits (in multiples of $25) by money order, draft, or check drawn payable to and accompanied by a deposit slip sent directly to the U. S. Civil Service Commission, Washington, D. C. Subject to the requirement that deposits be in amounts of $25 or multiples thereof, and to the limitation that total voluntary contributions may not exceed 10 percent of the basic salary received since August 1, 1920, an employee may make optional deposits as often or as seldom as he desires. Receipts for each deposit received will be issued by the Civil Service Commission on Form 3475.

The 3 percent interest compounded annually, allowed on optional deposits, compares very favorably with current interest rates obtainable from savings banks and other savings institutions and interest rates generally on investments involving low risk. This comparatively liberal interest feature combined with the unexcelled security offered by the Civil Service Retirement and Disability Fund, will appeal to many employees interested in making safe investment solely for old-age benefits.

The primary object of the Retirement Act is to provide an income from which employees may supply their needs after retirement for age or earlier disability. Likewise, the primary object of permitting voluntary additional deposits is to make it possible for employees to increase the annuity income available to the employee after retirement. As that is the primary objective, the Act makes no provision for refund other than in event of (1) death or (2) separation from the service, the latter being construed by the Commission as including transfer to a position not within the purview of the Retirement Act. Aside from refund in event of (1) death, (2) absolute separation from the service prior to becoming eligible for annuity, or (3) transfer to a position in whih the employee does not retain his status under the Retirement Act, there are no provisions for withdrawal of voluntary deposits once made; nor is there any provision for loans. In this respect the status of deposits in the Retirement Fund varies from that of payments on most life insurance or annuity policies, which usually permit loan, cancellation or withdrawal.

THE EDITOR DISCOVERS

Mr. Fitzwater of the WO Division of State Forestry, who recently visited the Prairie States Forestry Project, reports that a total of 3,250 miles of new belts were established this year, with the planting of about 38 million trees. About 6,000 additional farms were served. These figures bring the totals to date to 14,250 miles of belts planted with 165 million trees and 23,000 farms served.

He said that in reviewing the old tree claim belts on his first visit to the project in 1935, he gained the distinct impression that there was no question but that trees would grow if given proper care, and that his visit this year confirmed that impression. Survival and tree growth in general is good on sandy soils but tight soils prove quite a problem. Some excellent belts, however, were noted on severe sites, in regions where rainfall is scanty but where excellent cultivation has been given and the trees were in fine shape. Cultivation seems to be 75 percent of the battle. Some trouble is being encountered with borers and fungi, both of which have always been present and are directly tied in with drought, and improvement in moisture conditions will overcome them.

Mr. Fitzwater said that it was interesting to learn that in many cases farmers who were at first skeptical of the results to be obtained from the shelterbelts their neighbors were planting, soon became enthusiastic supporters of the project after they discovered the belts actually were growing. There is a feeling throughout the region that the Forest Service has done a good job and has definitely demonstrated that trees can be successfully established.

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The question is often asked whether parachutes can be used again after being damaged by landing in trees. The general impression seems to be that after a parachute has been punctured it is discarded. Mr. Headley, of the WO Division of Fire Control, advises that except in experimental and training work the landing is never made in trees if it can possibly be avoided. It is, obviously, hard to recover the parachute from the top of a tree, but when tree landings are made unintentionally or accidentally, damage to the parachute has proved to be surprisingly small. Moreover, an expert rigger has little difficulty in making any necessary repairs. It will take experience to determine how long a parachute can be used, but as a wild guess it might be said that an average life of 5 years may be expected. This is important because parachutes cost around $300 and even a 20 percent depreciation charge would mean an average annual replacement charge of $60.

National Forest receipts for the fiscal year ending June 30, 1940, totaled $5,859,197, an increase of $988,680 over the previous fiscal year. Timber sales brought in $3,871,352, an increase of $1,085,740. Grazing receipts totaled $1,457,133, a decrease of $83,725. Special Uses brought in $363,258, a decrease of $1,508. Receipts from other activities were: water-power, $81,824, a decrease of $18,442; forest products sales, $50,701, an increase of $1,424; timber trespass, $13,454, an increase of $3,596; timber settlement, $7,767, an increase of $2,179; grazing trespass, $5,760, a decrease of $1,737; occupancy trespass, $2,219, an increase of $1,175; fish and game, $5,729, an increase of $375. Total receipts by Regions were as follows:

R-1 - $714,069, an increase of $331,997
R-2 - $697,731, a decrease of $73,734
R-3 - $461,987, an increase of $7,005
R-4 - $590,483, an increase of $15,222
R-5 - $627,937, a decrease of $76,179
R-6 - $1,430,934, an increase of $339,384
R-7 - $135,505, an increase of $46,503
R-8 - $912,486, an increase of $269,065
R-9 - $226,845, an increase of $125,762
R-10- $61,220, an increase of $3,657

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In the July-Aug.-Sept. issue of its official magazine, "Trees," the Society of the Men of the Trees, of England, prints the following under the title "Our Call to the New World Order":

"When we look upon the world to-day in all its chaos and upheaval, we are led to ask ourselves what we as a Society can contribute to bring about a speedy adjustment and mitigate the suffering of humanity. It seems that every man-made device has been tried and found wanting. Whole nations are being torn by heartrending suffering caused by the present conflict. Daily the terror increases and the world waits for divinely inspired leadership, and we must at last admit that without the realisation of the essential oneness of mankind, the new world order for which we are all striving cannot come into being.

"It is in this crusade for spiritual unity that we Men of the Trees can do our part. We are a united brotherhood linked by the love of trees and natural things and dedicated to the task of handing on the tree heritage of the world for others to enjoy.

"The task of replenishing the forest resources of the world will demand the concerted action of all people everywhere. Here is an ideal which may unite mankind in a universal constructive effort, and in so doing overcome national and racial prejudice, and barriers which at present seem insurmountable. We believe that the love of trees in itself is a living link which will bring together the peoples of the world and unite them in one great Tree of Life."

Richard St. Barbe Baker, founder of the Society and Editor of the magazine, visited the United States and Canada about a year ago.

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W. L. Dutton, who is in the West on a field trip, sends us the following with the comment: "I am enclosing a gem in the way of a letter from a Region 3 permittee to the Regional Fiscal Agent":

"There ain't nothin' like a 'Third Notice' to break a man out in a cold sweat. I imagine it's something like that they give in 'third degree'. Needless tuh say I went pawing among my records cause I knew this was one time you Felluhs had made a mistake. Well, the only thing the pawing netted me was 'clutter'. In a maudlin moment I must have got the idea I sent you my fees last January and have been congratulating myself ever since on how well I'm doing in this here cow business. It just goes tuh show you kin never tell what the mail will bring forth.

"There's lots of upsets in this business. We had a fine spring and then the screw worms got bad. Right after that the polutishans got coming around and it was'nt long after that forest fires broke out. In between Ranger Pilmer comes around askin' fool questions and if yuh got any time in between there's the census taker and Raleigh's liniment man. I'm no good at figures and I hope I give him the same ones I gave you. Otherwise I'm in fer a lot of explainin' I guess.

"We had two showers last week and a good rain yesterday. Some seem tuh think it's the end of the world. I don't know what to think.

"Cattle is in good shape and prices is fair. But we don't know if we kin sell 'em this fall er have tuh take it out in trade. There's some talk about putting us in the army. I wouldn't like that. My feet are no good, but I told the man I would be O.K. in the Navy if I could take a horse along. He thot the idea was crazy.

"Hope you are the same."

THE CCC AND NATIONAL DEFENSE

In "Look" Magazine for July 30, 1940, Major Leonard Nason, Reserve Corps, among other things, has this to say of the CCC:

"The basis for our new army should be the Civilian Conservation Corps which is now assigned to tasks of primarily non-military character. This national organization has been funtioning now for seven years. It is under the able direction of the best brains of the army and is supervised by the finest type of flexible-minded officer. Assisting these able officers are reserve officers in their civilian status. The whole thing is a going, successful concern with the efficient organization and personnel needed for units of our new army.

"The CCC administration knows more about camp sites, about procurement of supplies, about making co-operative teammates out of civilian youth than any other department of the government. They are practical men, solving problems daily with American youth -- our great military potential, our manpower. They have to solve these problems wisely because they have no military rank with which to impose unsound solutions.

"The CCC at present is only an infantry organization, but its training includes that given to engineers. All it needs is the outline of engineer organization and it will make vitally needed engineer regiments. ...

"The National Guard in its summer camps and winter drills teaches many thousands the fundamentals of soldiery. In building our new army it will serve as it did in 1917 when it provided the nucleus for two out of every five units that went overseas.

"But the National Guard should be moved from its position as second line of defense (behind the regular army) to third, behind the CCC. For the guard is so constituted that its mobilization would seriously cripple industry. Many of its non-commissioned officers are skilled workers. The vast majority of its officers hold responsible positions in their communities. They are the business and professional men, the people upon whom the very structure of the community rests. Sudden snatching of them from their duties would be a profound and lasting shock not easily corrected."

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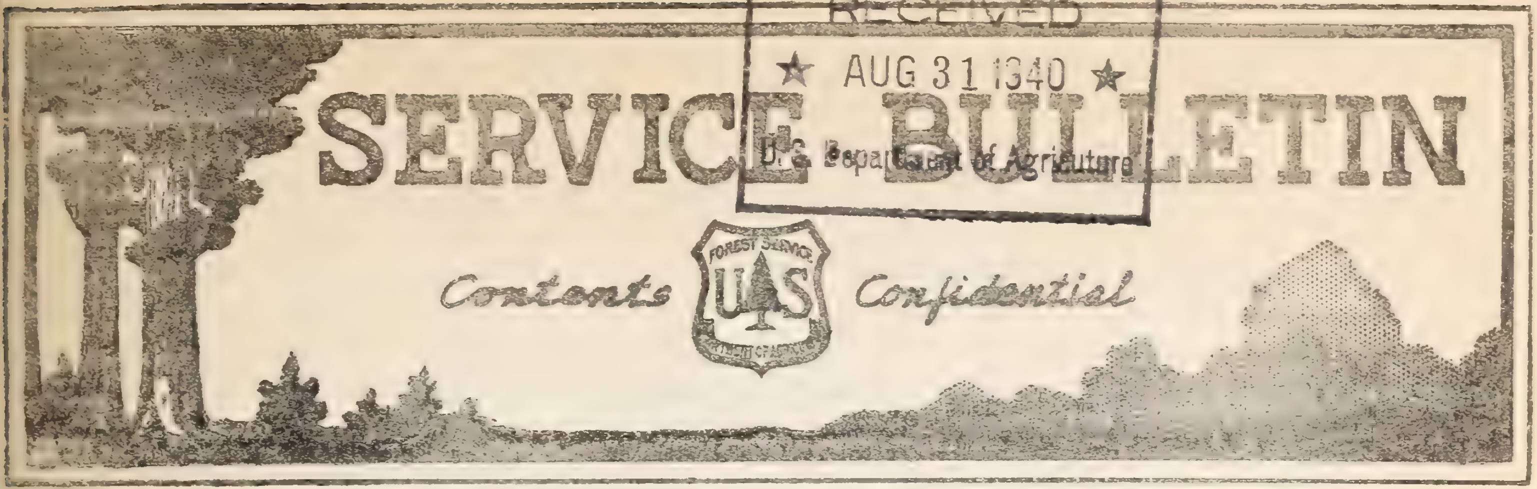

SERVICE BULLETIN

Contents Confidential

Vol. XXIV No. 17 Washington, D. C. August 19, 1940

GHOST TOWNS REVIVE

By Raymond Tetzlaff, Nicolet

In Wisconsin's Nicolet National Forest, ghost towns are coming to life again. For once more the woods are furnishing more than a mere livelihood to a portion of the population.

The town of Hiles in the northern part of the State is an outstanding example of the new revival. During the prosperous 1920's two sawmills, the Fish and the Gardner Lumber Companies were running to capacity. The peak of activity was reached in about 1928. White pine was gold to the lumberman, and axes bit greedily into the big timber stands. Then, when the haul between woods and mills was no longer profitable, the lumbermen pulled out, leaving hundreds of workers stranded. In 1930 just 141 people were entered on the census count.

Hiles was doomed. Empty buildings, a weed-grown park, and a rapidly thinning population gave the town a general "run-down-at-the-heels" aspect. True, the cut-over land had been sold for farming. Many thrifty Poles and Germans from Chicago and Milwaukee had been attracted to the vicinity. But the land, some of which had been sold for as much as $300 an acre, proved a poor investment even to these energetic farmers. "Another ghost town," said the welfare workers as their relief load increased. "A town with a past, but no future."

But that prediction has been discarded today. Hiles has a future. Not as bright and meteoric as its past, perhaps, but the woods surrounding it support a few hundred people now, and will support more in years to come.

Today there are regular shipments of pulpwood, ties, sawlogs, and cedar products to nearby industrial centers. Backbone of the industry is the Hiles Forest Products Cooperative Association. It is a private enterprise of 22 members whose work is based entirely on harvesting the National Forest timber. The Forest Service under the supervision of Warren T. Murphy aided in the establishment of this cooperative.

William F. Bonack, president of the association, explains the situation. "The Hiles Co-op, organized a little over a year ago, started on a small scale. It had to, because cooperation was rather hard to get at first. The idea prevalent was 'every man for himself'. Now we are beginning to recognize that 'in union there is strength.'"

Bonack continues "When the Forest Service issues bids for the sale of timber near Hiles, we are not, of course, favored any more than other operators. But our combined forces eliminate the scalper, or middleman, and so give us bigger profits. We can harvest the timber cheaper, and even take bigger lots than would be possible for a single operator to do."

The association is too recently established to pronounce it a success. "But it isn't so much what the Co-op has done as what it can do for us," Bonack asserted confidently. "All indications point to the fact that the idea will probably work out. We used to string along from day to day. But now, working together, we can get bigger orders, plan further ahead."

He estimates that about 108 people, counting dependents, earn their living through this cooperative. Members exchange labor in building houses, garages, or doing other work when not occupied in the woods.

"We have saved a lot of men from going on relief," Bonack said, "but we cannot provide year-round employment for all of them. Small time farmers can develop their plots in summer and work with us in the winter."

In Hiles alone, 15 to 20 people, a high percentage of the total population, have been able to leave WPA jobs permanently. This development is duplicated in other small communities in or adjacent to the Nicolet Forest.

In Bonack's opinion there is still much that can and should be done. Recreation centers and playgrounds can be developed for vacationists. This will provide some seasonal employment for those who are not farmers and enlarge the market for farm products, such as milk, butter, eggs, etc. The Cooperative can provide better supervision on cutting timber so that the most can be cut from an area and still leave beauty of scenery for the tourists. "Yes," Bonack emphasized, "The future of Hiles lies in conservation, recreation, and keeping nature in balance."

This is the goal toward which the Nicolet Forest has been working. In the past year approximately $36,600 worth of timber was sold by the Forest. This is a record--three times that of the Nicolet's previous high. The majority of the sales have been "family size," or sales less than $500. These small sales of timber have enabled farmers and people on WPA to cut National Forest timber and increase their earning power. The harvesting and milling of this timber required enough labor so that 260 woods workers on the Nicolet Forest were provided a living or additional income. Since the average family here numbers five, this means subsistence for 1,300 people.

At the present time there are, within the boundaries of the Nicolet, approximately 5,400 engaged in some phase of the lumbering business; 2,181 farmers, most of whom are dependent upon part-time employment from the lumber industry if they are to maintain a reasonable standard of living; and over 600 in other businesses, such as resorts, stores, gas stations, garages, etc., which are indirectly dependent upon the Forest to attract their customers.

So the woods are again playing a major role in the economic life of northern Wisconsin. It will be at least 25 to 30 years before the lumber industry itself can come back to anywhere near its former supremacy. But in the meantime the mature trees of the growing forest will be harvested, providing steady work and income to a substantial proportion of the population. And therein lies hope for the future of Hiles and those other little communities that had almost--but not quite--become "ghosts."

FIRE LICKED AGAIN

By L. A. Campbell, R.1

Region One resembled a huge anthill during the July 12 to 15 emergency, with trucks, pick-ups, busses, airplanes, and pack strings rushing here and there in a constant stream, **hauling men and supplies to fire lines.**

A master penman with a flare for dramatization could build stirring stories of loyalty, determination, courage, and sheer physical endurance out of the activities of the firefighters and their supporting personnel. Especially if he were fortunate enough to be able to see even a portion of this organization in action on an area covering some 60,000 square miles of rough mountainous country, more than a third of which is without a semblance of roads.

This thrilling drama was enacted with an absence of confusion and with a record of accomplishment that pays high dividends for the long hours of training, planning, and preparation for just such emergencies. It certainly brings home the need for developing the first-line firefighting organization to full strength and the value of a well-trained, highly skilled, well-equipped firefighting organization.

Lookouts with shutters blown off in the storm, a blacksmith looking for a string of pack mules to shoe in an almost trackless wilderness (and finding it), windfalls holding up travel, men and women putting in sleepless nights to keep the wheels moving, dead weary firefighters coming in from one fire only to start for another with just a few hours' rest, men hiking for hours over steep mountain trails, parachutists dropping on fires for the first time, lumberjacks from Libby anxious to get home in time to vote, dry-land farmers from eastern Montana getting their first taste of firefighting in the tall timber, ex-forest officers volunteering their services without pay, and a hundred other incidents all old stuff to the Forest Service possibly, yet always new.

The figures cannot tell the human interest side of this story, but they do give some conception of the size of the job. Latest available reports show that Region One had an estimated 966 lightning fires in three days, starting Friday night July 12. When it is understood that much of the region had had no appreciable rains for the previous six weeks, that the fire danger averaged 5 to 5.7 and that the strikes came from a dry storm with considerable wind and very little rain, some understanding develops of the possibilities for a real blow-up.

Approximately 8,000 men, including 2,100 CCC, were mobilized to control these fires. Overhead from eastern forests, the regional office, and even two units from Region Six were practically all out. It is believed that not more than 10,000 acres were burned, probably less, and much of this was in old burns or bug-killed timber. Most fires were held to a nominal acreage, only about 25 getting to any appreciable size, and most of these were reported as 15, 25, 80, or 150 acres. A few grew to 500 to 800 acres but only one was reported as over a thousand acres and that was the fire near Talley Lake on the Flathead which reached about 2,500 acres and required nearly 30 miles of line to control.

The Kootenai appears to have been the worst hit. Up-to-date they have reported 203 fires, 2,300 firefighters, including 200 CCC, on the fire line, and all fires under control. Firefighters built an estimated 60 miles of line - a distance equal to building a fire line from Missoula to Seeley Lake.—"Northern Region News," July 22.

COMMON TREE NAMES MADE UNCOMMON OR THE TAXONOMIST WORKS ON THE COMMON NAME

By George H. Hepting, Associate Pathologist,
Appalachian Forest Exp't. Sta.

Many of the "Approved Changes in Sudworth's Check List" put out in mimeographed form by the Forest Service in January, do not seem to be approved by those who use the names most. We, in the Division of Forest Pathology, have tried to follow Sudworth's initial check list religiously, even though we had to compromise our consciences occasionally in using such a name as northern white pine. Some of the new "approved" changes, however, I openly rebel at, and will only use in publication if I am forced to do so by Department policy. I refer to such new names or one-word spellings as yellowpoplar, redcedar, black tupelo (for black gum), and honeylocust.

This is not the first time that scientists have attempted to uproot old common names by proclamation. For example, entomologists have for years insisted that we must call lady bugs, lady bird beetles, and June bugs, May beetles, but people go right on calling them lady bugs and June bugs and they are understood. The most important consideration in adopting a common name is that the name be understood by as large a proportion of the people using that name, as possible. When a person says black gum in the South, every forester and woodcutter knows what species is referred to. What does it matter whether or not some people in Australia call eucalyptus black gum, and what does it matter that gum is vegetable product and that there are many kinds of it? The only people who might be the least confused by the term black gum are those in foreign lands, or for other reasons are not familiar with the tree, and for the benefit of those folks we always give the botanical name along with the common name in technical publications. In giving the reason for changing the name of black gum in "Approved Changes in Sudworth's Check List" the last sentence reads, "It would be better for all concerned to adopt Tupelo as the English name for Nyssa." Perhaps the committee thinks so, but I doubt whether southern foresters, and especially lumbermen, who have to use these names, would agree with this dictatorial statement.

I can not agree that all common names must follow rules. It is true that we should not call a pine an oak, or a cherry a maple, and it is too bad that Liriodendron is known throughout its commercial range as yellow poplar, but the latter tree will be called yellow poplar and be so written, in spite of any fulminations of the taxonomists, and they might as well realize it. Few common names are precise and it is for that reason that we have botanical names.

I am now working on a farmers' bulletin on eastern tree diseases. What farmer would know what I meant by black tupelo? In the host index redcedar would appear under "r" and yellowpoplar under "y." Even though in our Department publications we put the old names in parenthesis after the new, and use "see" references in the indexes, it is doubtful if we can make much of an impression on the great weight of common usage, and if common usage is clear to 95 percent of the people and the other 5 percent have botanical names to guide them, why make a change? More confusion will result from some of the changes this committee has proposed, than ever would have occurred with the old well-established names.

The above are my personal views, and are not in any way connected with the official views of the Division of Forest Pathology. I hope that before the revision of the check list is printed, the committee will reconsider some of its arbitrary decisions. They are trying to help us with our names, and they have helped us a lot, now let's see if they will make some concessions to common usage in their common names.

ANOTHER USE FOR PINE NEEDLES

By A. L. Shepard, Southern Forest Experiment Station

New uses for pine "straw" have been devised from time to time. At present loblolly pine needles are used extensively in the south for mulching strawberry beds. Also, attempts have been made in recent years to make mattress stuffing out of longleaf pine needles.

The use of longleaf pine needles as litter for poultry houses has recently been developed by an operator in Harrison County, Mississippi. The patented process consists of feeding dry longleaf pine needles (together with a few green pine cones for each ton of "straw") into a mill which cuts the needles into pieces about one inch long. Shorter pieces, dust, and trash are blown out by a fanning mill. The more or less uniform lengths of clean pine needles are conveyed into a bin, during which they are disinfected by an oil supplied in the form of mist. The chopped green cones add the odor of pine oil to the litter.

This longleaf pine litter when used in poultry houses absorbs moisture without becoming matted or soggy, thereby improving sanitation. The pine oil tends to overcome the unpleasant odors common in the brooder house. After the litter has been used for a week or two it is discarded and allowed to decompose, thus forming a fertilizer equivalent in value to commercial fertilizers at $10 a ton.

The longleaf pine needles are delivered at the mill by local farmers, for $5 a ton. The mill operator sacks the manufactured litter and sells it locally at $15 a ton. Owing to high freight rates, the use of this litter at present is localized.--Southern Forestry Notes.

IN-SERVICE TRAINING FOR STENOGRAPHERS

By Evelyn E. Kiene, R.2

The various articles in the Service Bulletin on in-Service training for stenographers leave me with the feeling that something is lacking, and I'll put in my two cents' worth, even though it also may miss the real point.

A Supervisor is required to spend a certain amount of time with a new Ranger. Why wouldn't a new clerk find her place sooner if she knew what it is all about and be of greater value in less time? I don't think we need a forestry school for stenographers, nor do I think reading the Copeland Report would enable the new stenographer to answer any question propounded by a waiting visitor. A stenographer starting in on any new job must learn the terms and activities of the business, and no one expects her to pick this up immediately. It seems to me the first thing she needs is background training. Someone, preferably her immediate superior if he is qualified to handle it, should spend some time with her when she reports for duty, explaining the entire Forest Service set-up, its place in the Department, the Regional division of jurisdiction, the general objectives, the purpose of the Experiment Stations, etc., and just where she fits into the picture. An organization chart or the Service Directory will be helpful in this presentation. If she is employed in the Washington or a Regional office, the principal functions of each Division can be outlined in a few words. She should then be given the written instructions on form of correspondence; a condensed version would be more helpful than the Manual. She should have personal copies of these instructions and a handbook on office procedure, and encouraged to take them home and study them in the evening, as these two things are going to be the most important to her in the beginning of her employment.

After a week or so she should feel "at home" in her job and be ready for study work. Knowledge of the business is bound to grow as time goes on. It is customary in the Service for the dictator to turn previous correspondence over to the stenographer when dictation is completed. She should at least glance through the file, see what is going on, what questions are being raised, and how they are being answered. She will thus learn something about one activity, then another, and so on. If she is assigned to some Division, the applicable Manual or handbook instructions should be carefully studied. The Service Bulletin and other house organs are also information sources.

A "show me" trip for stenographers and other non-field-going members to a timber sale area where selective cutting is going on will mean more to them than reading a book on the subject. There should be more of this for Regional and Washington Office employees. The stenographer in a Forest office has a much better chance of learning about the work of the Service because of her intimate association with diversified activities. In the larger offices, much benefit will accrue to stenographers and other employees through regular general meetings of the entire force, at which each Division takes its turn in explaining its work and objectives. The "old hands" will benefit by such meetings, also, as new activities are always developing.

In a bulletin issued a while ago by one of the Regions, the need was mentioned of a "clerk at large" in the Regional Office to break in and enlighten newcomers. While it may be possible to find some one individual who is particularly good at this, it seems to me there is more in favor of having this training handled by the employee's immediate superior, who is always available for subsequent training and assistance.

(The following article tells of a plan of training for new employees in the Washington Office, prepared by a committee of girls, which will soon be put into effect. Copies of the plan will be furnished to field offices in case any of the Regions desire to put a similar plan into effect. - Ed.)

ORIENTATION PLANS

By Miriam W. Drimmer, Washington

Some day soon a new girl entering the employee of the Forest Service will be greeted by an official Sponsor, assigned to do this receptionist work by the Chief. Information that took new girls months to discover will not be foreign to her after a week's training. Her freedom to ask the Sponsor anything that puzzles her will awaken her enthusiasm, imagination, and response to what the Forest Service has to offer.

Then, when her new work begins, her future Supervisor will be prepared to present it to her in an interesting and inspiring manner. Her duties will be made to seem less humdrum when she realizes how they fit into the purpose of the Forest Service. Her strangeness will quickly become less acute and her ability more pronounced.

This has all come about through the appointment of a Committee by Mr. Keplinger, to study In-Service Training for clerks, stenographers, etc. This Committee formulated a plan which provides for Sponsors (a method used by many large industries), who will have several 30-minute "conversations" with new girls, explaining in brief the customs, purposes, policy, ideals, and requirements of the Forest Service. There is also a provision for more training, on the job, so to speak, by the immediate Supervisor, who in the past has always wanted to be helpful but due to pressures, sometimes found it difficult to do all she had planned. With a plan approved by the Chief for the Supervisor to follow at his or her discretion, there won't be so many hit-and-miss attempts at adjustment.

Later on there will be booklets, maps, pictures, and also a lecture for each group of new people at which several of the "big shots" will be introduced, and say a few words, and then be followed by the Forest Service's Chief-Lecturer.

Also, the older employees have not been forgotten and a plan is under way to provide interesting and useful training for experienced girls. All these plans have been written up and we hope will be a "fait accompli" very soon. What do you think of it?

"WE CAN TAKE IT"

By Eddie Woods, Enrollee F-21, Jefferson National Forest

There were only five more days left of the current "fire season", and as yet, I had not been on a fire line. I was sure there was no cause to worry, for there had only been four fires during the season. This will keep my record clear, were my thoughts, having been in camp ten months, without even being on a grass fire.

It was a beautiful day, the sun was bright and hot. At eleven a.m., we were to leave for another camp to play our first game of baseball, being Saturday, no one was working and most of the fellows who were not on fire duty were going with the team to watch the game.

The team rooters, dressed in their best, numbered about thirty, were all set to get on the truck. But the scene changed - three times the "Top Kick's" whistle blew, which indicated a "Fire Call". Fifty men were wanted at once. The trucks were ready and the men on fire duty took their places on the trucks. "Lucky I'm not on fire duty," I said to one of the fellows. Little I knew that there would be another call for men. Five minutes later, there was another call, more men were wanted. The men in baseball suits were instructed to change to work clothes and be ready for the fire with their canteen full of water.

This was no surprise to them, although a few looked as if an unbelievable sight had been witnessed, while others were saying: "What difference does it make. We Can Take It".

We knew it was a large fire, yet we did not expect to witness the scene that met our eyes after an hour's ride. The whole mountain top was on fire.

Things happened so fast that I could hardly keep up with them, tools were given out, and at a fast walk we started toward the fire. From then until ten o'clock that night there was nothing but fire, back-breaking work trying to control the fire. All I can say is - that I became a veteran firefighter in a few hours.

Back to camp once more, a tired and dirty crew of men, asking one another who won the ball game, and what was the score. One fellow said: "Old Man Fire Knocked a Home Run With The Bases Loaded, and got the best of us." He may have knocked a home run, but we came out on top with flying colors.

The next three days were spent in cleaning tools and getting ready for another fire, which we all hoped would not come. But our hopes were all in vain. We were called to a fire larger than the previous one, but we knew what to do, we knew the sooner the line was connected, the sooner we would earn a rest. After what seemed like ages, we were relieved from duty and started back to camp, a tired and dirty crew of men.

All is not peaches and cream in the CCC, yet you can ask any young man who has been in this organization what he thinks of the CCC, and it is my opinion that he will tell you that there is not anything to compare with it.

Remember - - - - - "WE CAN TAKE IT".

(From "The Bob Cat" magazine of Camp F-21.)

COMMITTEE CONSIDERS "PRE-SERVICE TRAINING" SUGGESTIONS

As is the custom of the Washington Office, the suggestions contained in H. C. Lee's article "Pre-Service Training", which appeared in the July 8 issue of the Service Bulletin, were referred to the committee cooperating with the forest schools, of which Dean S. T. Dana of the University of Michigan's School of Forestry is chairman. The following is taken from Dean Dana's reply:

"I do not think that the finding of problems suitable for graduate study causes much difficulty at most schools of forestry. It would certainly do no harm and might be really helpful for the Forest Service to suggest certain subjects which it would like to see investigated....

"Even more helpful than the suggestion of subjects suitable for study would be the providing of field data for analysis and interpretation by the students concerned. One of our chief difficulties, particularly in connection with management problems, is the getting of basic information, which obviously is not available in the vicinity of Ann Arbor, and this must be the case of many other schools. Matthews has succeeded in getting some material of this kind from the Forest Service, such for example as that used in connection with the development of the working plan for the Goodman property in Wisconsin, but we never have enough. If you take the matter up with the regional officers, it might be well to suggest also that in connection with any list of subjects they indicate those for which the Forest Service has basic data which might be supplied to the schools for student use....

"So far as our students are concerned, I do not think that the idea is at all prevalent that the only value of their research lies in its contribution to the 'general funds of knowledge'. Most of them, I believe, realize that its chief value is in their own development and particularly in giving them training in formulating, carrying through, and writing up a specific project, including of course the acquirement of facility in handling the technics involved. This is especially true of theses connected with the master's degree in which really original and important contributions to the world's knowledge in our experience are rather rare. Doctoral dissertations, on the other hand, are supposed to contain some really original material, although even here the training of the individual himself is, in our judgment, usually more important than his discoveries."

(It seems probable that local cooperation will take care of the matter now that it is brought out in the open, but the Bulletin will be glad to publish further comments or suggestions from the field. - Ed.)

DON'T FORGET HI-CATOCTIN

By W. R. Mattoon, Washington

Hi-Catoctin camp is located on the top of the Blue Ridge Mountains in northern Maryland A delightful recreational camp, built and operated by the Federal Government for Government workers and their sponsored friends - I am wondering whether everybody realizes this opporunity for an out-of-door summer outing.

Cabins for 2 or 4 people, recreational and dining hall, craft shop, games, riding, large swimming pool, carefully planned program of sports, hikes, and dances for those who want them, and excellent food go to make up the camp, with experienced hostesses and counselors for children. The place is quietness personified. At an altitude of 1800 feet on the Catoctin Mountain, the days are real comfortable and the nights call for a blanket or two.

Hi-Catoctin is about 64 miles from Washington via Rockville, Frederick to Thurmont (on way to Gettysburg). There turn left and drive westerly 3½ miles to a Government rustic pole gate on the right. A range guard will greet you and answer questions, if any. Now drive up the mountain 2½ miles and turn in at a second (smaller) pole gate (on the right) marked "Hi-Catoctin Camp".

The rates are very reasonable and include lodging, meals and full camp program. Regular camp periods begin Sundays at 5 p.m. They are for a 6-day, 7-day, or 10-day period (or longer) at about $2 a day, or a week-end period (if available), Saturday 5 p.m. to Sunday 4 p.m., at $3.50. Season ends Monday night, September 2. Note: Medical examination is free at the camp upon arrival.

To make arrangements for camping and full information, consult the Hi-Catoctin Camp Office, 1135 - 21st St., N. W. (National 7363). The A.R.A. (Athletic and Recreational Assn.) of the Department of Agriculture is one of the employee organizations directing the camp, and contact may be made with James Henry Lyman, Room 5717, Branch 2013.

(It may be a little late for many to plan on visiting the camp this season, but you might keep it in mind for next season.-Ed.)

REVIEWS OF RECENT BULLETINS

Cascade Mountains Study

The Washington State Planning Council, in cooperation with a Special Study Advisory Committee, various Government Bureaus, and other agencies has conducted an inquiry into the kind, amount, and utilization of the resources of the Cascade Mountains of Washington. A report on the inquiry has recently been issued under the title "Cascade Mountains Study." It contains information on the land ownership of the region, National Park Service and Forest Service policies and practices in the management of their lands, physiography, climatology, and various natural resources of the region. The following recommendations are made by the Washington State Planning Council:

1. That the natural resources of the Cascade Mountains be developed further and managed on the multiple use principle so as to provide in an orderly manner needed raw materials and recreational areas for the people of Washington and the Nation.

2. That no additional lands of the Cascade Mountains be converted into use as a National Park.

3. That the people of the State be consulted and their prevailing sentiment be respected in considering and deciding upon any change in Federal control or operation of any of the lands within the National Forests.

4. That the timber, both privately and publicly owned, be operated under proper forest management and on a permanent yield basis, thus providing a continuous supply of lumber, pulp, plastics, and other merchantable forest products.

5. That County, State, Federal, and private agencies cooperate in making a detailed and comprehensive survey of the minerals of the Cascades. Furthermore, that prospecting and mining be continued and be encouraged.

6. That County, State, and Federal governments and private agencies cooperate in constructing roads within the Cascades not only for recreational travel but also to make accessible forest, mineral, and other resources, and to connect the several sections of the State.

7. That the grazing areas be left open for use of domestic animals under proper supervision and control.

8. That the multiple use principle be applied to the water resources and that they be conserved and equitably apportioned for storage, irrigation, electric power, domestic use, industrial use, and other uses.

9. That the wildlife be judiciously managed by State and Federal agencies so as to contribute to the economic and esthetic well-being of the people of the State and to provide recreation for all.

10. That public and private agencies cooperate in building recreational facilities to meet the general public demands.

"Lumber Distribution and Consumption, 1938 in the Continental United States"
By R. V. Reynolds and Albert H. Pierson of the Division of Forest Economics

To facilitate answering numerous requests, the Washington Office Division of Forest Economics has prepared this multilithed release giving preliminary statistics of lumber distribution and consumption for 1938. The complete report is now being printed. It contains the following data:

Lumber Cut

The lumber cut of the United States was 21,646,000,000 feet b.m. in 1938 according to the Bureau of the Census. In 1937, 25,997,000,000 feet b.m. and in 1936, 24,355,000,000 feet b.m. were produced. All regions in the United States, except the South Atlantic, cut less in 1938 than in 1937, and markedly so in the North Pacific region where Oregon outranked Washington as the leading State for the first time. The cut for Canada was also less. According to a preliminary estimate of the National Lumber Manufacturers Association, the 1939 lumber cut was about 25 billion feet.

Imports

The total lumber imported in 1938 was 535,000,000 feet b.m.; compared to 698,000,000 feet b. m. in 1937 and 671,000,000 feet b. m. in 1936. Canada supplied more than 91 percent of the total lumber imported in 1938. Of the remainder, much the larger part was Philippine hardwoods.

Exports

Lumber exports in 1938 compared unfavorably with those of any year of the preceding decade. The total, in fact, is smaller than any recorded in the preceding 40 years. The total exports in 1938 were 1,010,000,000 feet b.m.; compared to 1,526,000,000 feet b. m. in 1937 and 1,515,000,000 feet b. m. in 1936. The United Kingdom buys the larger part of the exported hardwoods, while South America, in the unsettled state of world economics, has become the best foreign market for southern pine and Douglas fir. Exports to Canada, of which three-fourths go to Ontario, are also assuming relatively greater importance. The 1938 total to Canada was 82 million feet, of which 41 million feet was hardwoods. In 1936 the export to Canada was 98 million feet, of which 46 million feet was hardwoods.

Distribution

The report gives the distribution of the lumber from State to State and region, as well as the amount exported by the several States.

Consumption

Nearly twice as much lumber was consumed in 1938 as in 1932, the low point of the depression. The total consumption in 1938 was 21,382,000,000 feet b.m.; compared to 24,160,000,000 feet b.m. in 1937 and 23,575,000,000 feet b.m. in 1936. The rate of consumption per capita in 1938 was 140 board feet for softwoods and 24 board feet for hardwoods. These averages, while relatively much larger than those of 1932 are less than those of 1936 and 1937. Under present economic conditions the trend of consumption is too uncertain to justify prediction.

THE EDITOR DISCOVERS

The Magazine Section of "The New York Times" for August 4 devotes two pages to photographs of the National Forests and a brief article entitled "Our Green Mansions". The writer, Hal Borland, closes his description of the National Forests with these sentences:

"Forests of America. There is something of the deep woods and the towering mountain and the still, cold lake in all Americans, something of their strength and deep, calm purpose. We go back to them, out from the town and city to the forests, not to escape from reality, but to find it; not to forget, but to remember."

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President Roosevelt has signed an executive order designating 252 refuges administered by the Fish and Wildlife Service as National Wildlife Refuges, according to a recent Department of the Interior press release. Previously Federal wildlife refuges had been identified variously as Reservations, Bird Reservations, Migratory Waterfowl Refuges, Migratory Bird Refuges, and Game and Wildlife Preserves. No confusion is expected in the change of title of the 252 areas affected because the local, or identifying portion of the name remains the same. The Pelican Island Bird Refuge in Florida, for example, becomes the Pelican Island National Wildlife Refuge, and the Lower Souris Migratory Waterfowl Refuge in North Dakota changes to Lower Souris National Wildlife Refuge.

Twelve refuges administered by the Fish and Wildlife Service will not change title under the Executive Order. These are: Alaska Railway Muskrat and Beaver Refuge and Curry Bird, Game, and Fish Refuge, Alaska; Kofa Game Range and Cabeza Prieta Game Range, Arizona; Desert Game Range and Charles Sheldon Antelope Range, Nevada; Sullys Hill National Game Preserve, North Dakota; Upper Mississippi River Fish and Wildlife Refuge, Minnesota; National Bison Range and Fort Peck Game Range, Montana; Wichita Mountains Wildlife Refuge, Oklahoma; and Bear River Migratory Bird Refuge, Utah.

The United States National Bank of Portland, Oregon, one of the largest banks in the Pacific Northwest mailed to its thousands of depositors during the month of July a card asking them to "Keep Oregon Green and Prosperous" by preventing forest fires. The percent of forest fires in Oregon caused by human carelessness is given and the depositors are asked to help check this preventable loss by observing the six fire prevention rules, which are given on the back of the card.

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A recent newspaper clipping from the Salt Lake City "Tribune" containing a statement that two members of a committee would investigate grades on the Spanish Fork canyon livestock trail soon, as a result of complaints by livestock men that grades along the trails are too steep for most livestock, was recently routed around the Washington Office. When the item was returned for filing, it bore this penciled remark by one of the Assistant Chiefs: "The stockmen are getting soft along with other classes. They now have to have trails on grade for livestock. Ye Gods!"

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The following letter, signed by W. R. Prescott, Manager, has been sent to the 300 agents of the Hartford Fire Insurance Company and the Citizens Insurance Company in the southern territory which includes the States of Virginia, North Carolina, South Carolina, Georgia, Alabama, Florida, Mississippi, Louisiana and Texas:

"An intensive campaign is now in effect for the prevention and control of forest fires. We are extremely interested in this program, as it is for the conservation of our natural resources for the future.

"The United States Forest Service and the American Forestry Association have prepared posters and stamps, and we are giving you herewith a small supply of each, together with other interesting data. We hope that you will use them to the best advantage. There is a National or State Forest near you and your use of this information will be of great benefit in this campaign.

"It is our understanding that the United States Forest Service will distribute additional posters as long as the supply lasts. If you need more, you may communicate directly with them."

This program was launched by Mr. Geo. W. Smith, Special Agent for the two companies as a result of efforts made by the R-8 Regional office of I. & E.

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The United States Lines has announced a fifty percent reduction in fare to all Government employees and members of their immediate families on the second sailings of their passenger liners "Washington" and "Manhattan" to and from California. A similar reduction was made by the Company on the inaugural sailings of these two liners on July 26 and August 9.

The "Washington" sails from New York on August 30, arriving in San Francisco on September 14; leaves San Francisco September 17, arriving back in New York on October 1. The "Manhattan" sails from New York on September 14, arriving in San Francisco September 29; leaves San Francisco October 2, arriving back in New York October 16. Both ships will call enroute at Havana, Cuba; Cristobal and Balboa, Panama Canal Zone; Acapulco, Mexico; and Los Angeles. Sightseeing trips may be made at each port. No passports or visas are needed.

Half of the regular one-way fare will amount to $125.00 first class and $75 tourist class, while a round trip of 32 days will cost only $225.00 first class or $135.00 tourist class. This does not include hotel and meals for the three-day stop at San Francisco.

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James B. Terry, R-1, retired on July 31.

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Ranger David Lake, of the Lewis & Clark Forest, R-1, will retire on August 31.

KATHERINE L. REED AND NINA M. CONLEE RETIRE FROM THE SERVICE

By Emma H. Morton, R.6

Katherine Reed has left active Forest Service duty after more than 32 years of outstanding service. She belonged to the "expeditionary forces" - 377 men and girls who, on December 1, 1908, left the Washington Office to establish district headquarters at Portland, San Francisco, Ogden, Denver, Albuquerque, and Missoula. She is the last to leave the Service, of the girls who came West so long ago, and her record, as her many friends and co-workers know, is one of exceptional loyalty and efficiency.

Nina Conlee came to the Forest Service in 1924, after having served with the U. S. Health Service and Veterans Bureau, and has been with us ever since. She, too, has made an enviable record because of her excellent work and friendly, understanding personality.

July 25, 1940, always will be a memorable occasion. On that date, 74 girls, almost the entire Regional Office and Experiment Station feminine contingent, attended a banquet at the Oswego Country Club, held in honor of Miss Reed and Miss Conlee on the eve of their retirement. Gay flowers, gay dresses, and gay conversation predominated. The guests of honor were presented with gifts from men and women co-workers - all articles for which they had, from time to time, been heard to express a desire: For Miss Reed a book, Walt Whitman's "Leaves of Grass," a fountain pen, and a purse; for Miss Conlee, whose hobby is botany, a microscope, a kit of implements for pursuing her hobby, and a book on "Western Plants". The books were autographed by all of the guests, which made them more valuable as keepsakes.

We hope that Katherine Reed's purse always will be as full of money as her heart always has been full of loyalty; that Nine Conlee's microscope will make her retirement check look bigger, and that as they leave for a life of leisure they will find happiness and health for many, many years to come.

A ROBERT MARICICH MEMORIAL

Clipped From "Ravalli (Montana) Republican"

"In years to come, travelers in the Whitecap mountain area may chance upon a crumbling airplane, a broken-winged bird of the forest that took the life of its pilot as it came to a crashing stop against a mountainside. As the plane's wreckage mixes with timber downed by the elements and its identity as a man-made instrument of commerce goes down in the forest ruin, an epoch is marked for the valiant. There are always pioneers, and as the Ravalli Republican readers follow the tragic thread of information concerning Robert Maricich's flight, may they give homage to his memory and tribute to the fearless pioneering spirit that went down in an effort to help mankind keep its heritage, the forest and its resources.

"Of course we know that the remote Whitecap fire was kindled by lightning, but we know, too, that many a forest fire gets its start from man's carelessness. Campfires left burning, the cigarette dropped along a trail, or pipe ashes knocked out on a stump, can be as vicious as any lightning bolt when it comes to ravaging the woods. So, as the idea comes that a week-end fishing trip or overnight camp in the hills is good pastime, may we all stop and think. May we be reminded that Robert Maricich sacrificed his life in the line of duty for forest protection. That in the face of such a sacrifice it should not be difficult for any of us to forego untimely pleasure as a gesture of help to those who are endeavoring to save the forests from destruction. It is enough that their job includes battle with the elements, so may the people of the Bitter Root Valley, recognizing the benefit that comes from our mountain resources, pledge their whole-hearted aid to the cause. May they keep this pledge by staying out of the forests so long as such critical fire conditions obtain. An every-summer resolution to this ideal would be a memorial to the lost young pilot and if more thought is given to forest protection by the people who frequent the woods then, perhaps, Robert Maricich will not have died in vain."

(Pilot Bob Maricich lost his life in an airplane crash on the morning of July 15 while dropping supplies to the White Cap Creek Fire on the Bitterroot Forest. Dell Clabaugh, who was accompanying him as dropper, was seriously injured but is recovering.-Ed.)

WEATHER ROBOTS PLANNED FOR INACCESIBLE SPOTS

A radio weather robot, developed by two national Bureau of Standards radio engineers, Harry Diamond and Wilbur S. Hinman, Jr., with the cooperation of the Naval Bureau of Aeronautics, has undergone a successful two-months test at Naval Air Station near Washington, D. C.

Radio messages that it sends out at predetermined intervals tell the barometric pressure, air temperature, relative humidity, wind direction and velocity, rainfall and other meteorological factors.

A mechanical cousin to the high-flying radiosondes now extensively sent aloft by means of unmanned balloons for upper-air weather information, the new robot weather station is designed for stationary installations. It is actually simpler than the radiosonde type of weather observing machine.

By operating on a relatively low frequency, signals from the automatic weather station can be received with any standard receiver. Even through severe static interference, it will only be necessary for the operator, with stopwatch, to listen in and count the number of signals received in a given time. These can be decoded into the values of the various weather factors automatically observed at the distance place. In some cases automatic recording receivers may be used. -- Science News Letter, July 27, 1940.

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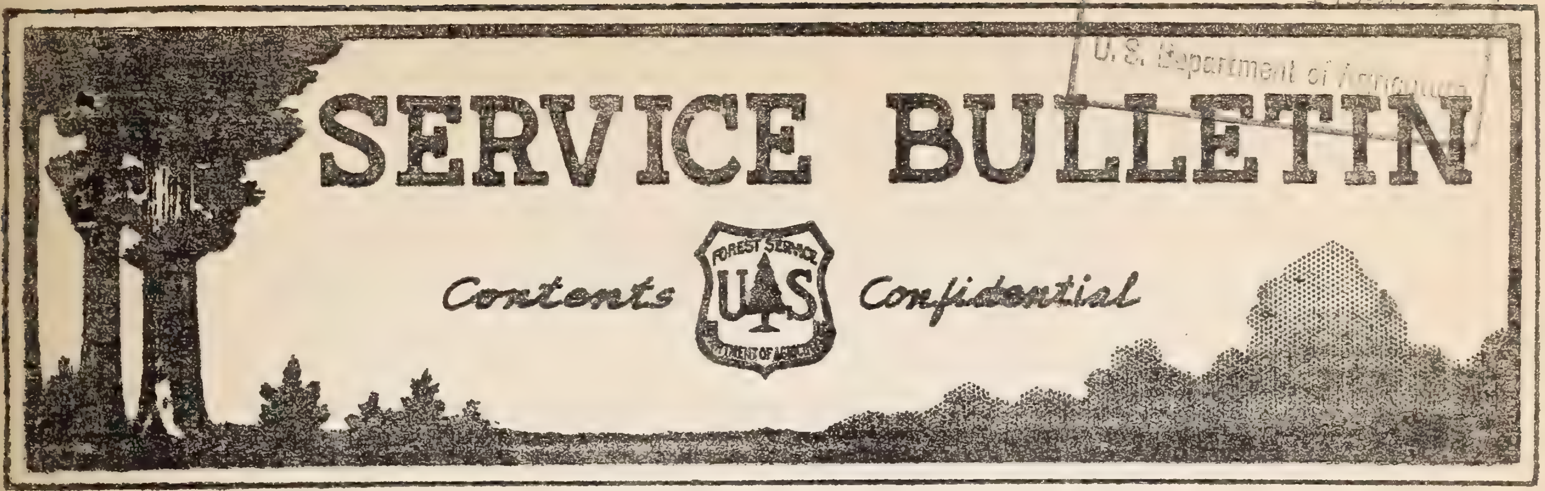

SERVICE BULLETIN

Contents Confidential

Vol. XXIV No. 18 Washington, D. C. September 2, 1940

SECRETARY WALLACE'S FAREWELL MESSAGE TO EMPLOYEES OF THE DEPARTMENT

In leaving the Department, my mind turns to the time when my father came here in 1921 as Secretary. He believed, with some others, then as now, that Government workers were clock-watchers and chair-warmers.

His opinion changed. He told me he found clear-thinking workers, loyal, deeply devoted to their duties. They were efficient, with a well developed sense of their responsibilities as public servants to agriculture and the general welfare.

While I had the benefit of his change of mind and I had long been familiar with the Department's work in the field and in Washington before becoming Secretary in 1933, I too have had my eyes opened wider to the caliber of the Department's staff of men and women.

I leave with an abiding respect for the Department's workers at all levels, with admiration for their experience, ability, and honesty. Leave-taking, after these years in which the Department has risen ably to challenge after challenge to the Nation and its agriculture, is no light and easy matter for me.

American agriculture was prostrate in 1933. The income of all farmers was at a record low. Land values crumbled. Debts piled up. Foreclosures reached an alarming rate. Every farm family made sacrifices that meant lower and lower living standards. Too often these sacrifices, in which farm women and children suffered tragically, were in vain.

In their futile efforts to keep up income to meet living expenses and other obligations in the face of falling prices, farmers were forced to exploit unmercifully their lands. They mined their soil to produce more and more to sell for less and less. Huge unsaleable surpluses were the result.

The condition of farmers was tragic; the condition of other groups of producers was desperate, too. Unemployment was widespread and businesses, small and large, felt the strait-jacket of depression. The climax was reached with the bank holiday of March 1933, a black period that reached every community. Democracy was on trial. Other nations, defeated, sought their answer by turning to totalitarian government.

The triumph of democracy which followed was led by President Roosevelt, who courageously, wisely, showed the way, supported by an able and intelligent majority in Congress. The job of administering new laws, new instruments of our Government on the agricultural flank of the administration's drive out of the depths of the depression, fell on us in the Department. We had the loyal assistance of farmers in every State and the sincere cooperation of State and local agricultural institutions.

The Department's folks met their new responsibilities without flinching at the size of the job, without waste and confusion. To serve the farmers of America, to assist them by extending them the hand of Government cooperation, and to do it with speed, understanding and with good order and honesty, became the objective for which all of you worked hard. Working overtime, giving up holidays, you made sacrifices of the kind that are never headlined.

During my years with you the Department has broadened its services to the public, and especially for the farmer -- and in the world in which we now live, it is clear that there are many problems, some not yet apparent, that remain and which will call for timely action.

Agencies we now have carrying on lines of work pioneered since 1933 include: the Agricultural Adjustment Administration, the Surplus Marketing Administration, the Commodity Credit Corporation, the Federal Crop Insurance Corporation, the Farm Security Administration, the Soil Conservation Service, and the Rural Electrification Administration.

Responding to needs, some long ignored, others new, we have expanded substantially work of the Farm Credit Administration, the Forest Service, the Commodity Exchange Administration, and the research, program making, and regulatory activities. Changes have been made, some occasionally disturbing the routines of some of you, but they are bringing improved public service which we all have at all times as our common dominant objective.

Now that the Nation must direct much of its energy to defense, the Department has additional problems to meet. Not only is it contributing to military defense through its laboratories and services -- it has a national responsibility to assist the Nation's agriculture to prepare for a variety of serious results growing out of the war.

Changes which we are undergoing in the world of today point to several significant needs in the Department of tomorrow. It will need far more, not less science. It will need more quickly than ever before to identify and classify changes in the world affecting this country and its agriculture -- and to respond with plans, programs of action, and skillful administration and management. Democracy, to survive, must have its ablest people, clothed with adequate authority, to meet promptly and intelligently new forces set in motion by the totalitarian governments with their extreme centralization, their opportunism, and their capacity for mobilizing manpower and technology.

As we face forward in this uncertain period, the workers of the Department will need to be flexible in their outlook. With that flexibility it is vital to remember that there are certain eternal verities and these must be reconciled with the tremendous changes that are certain to come.

I am confident that the Department and all its workers -- the administrators, the scientific workers, the rank and file of employees, who have all given their best while I have been in the Department -- can respond to the new needs with the same earnest concern for agriculture and the general welfare that has marked your efforts during my period with you.

SECRETARY WALLACE NOW A FORESTER

At an intimate informal luncheon on the Two-Bit Fund tables in the Chief's room on August 20 Secretary Wallace was given an appointment as Honorary Forester in the Forest Service to serve "wherever he may be, for duration of the work." The appointment will become effective immediately after the Secretary leaves the Department early in September. Mr. Clapp made the presentation speech and Assistant Chief Rachford in good old Range style poured the black java - from a silvery appearing rather than from the usual battered and black pot - whenever the cups became empty. The appointment form is reproduced on another page.

In his response the Secretary spoke of his pleasure in joining with the group that has the responsibility of caring for and developing so many things of which he is fond -- land, trees, grass, and water. In his usual diffident manner he expressed dissatisfaction with what he had been able to do for forestry when he thought of all that needed to be done. But he expressed the hope that 15 years hence it could not be said that the Department during the past several years had failed to recognize the importance of forestry in our national economy or had failed to make strenuous efforts to have this importance recognized in a farseeing and adequately financed and manned program. He expressed particular hope that steps were under way to meet the critical timber situation in the Pacific Northwest and elsewhere, and, in this connection, discussed various possibilities of extensive land acquisition through loans from the RFC, and otherwise. Range conditions on the forests were frequently mentioned and he seemed to feel that the Forest Service, during this Administration, has made decided progress in getting on top of over-utilization problems, thus leaving the ranges in a condition that would be a monument to the conservationists who have been working to that end. And again he embarrassed our administrative officers - as we understand he has done in the field - by asking such questions as "What is the real value and future of Poa bulbosa on your western ranges?"

Recreational use and water management were not overlooked by the Secretary in his exchange of comment during the hour and a half of the luncheon period. During this running review of our various activities, the desirability of "multiple use" and of "territorial integrity" were mentioned time and again, as befits one of our group. Many other subjects were of course discussed, all interesting, some of historical significance. Indicating that the Secretary's regard for forestry and the forestry program is very deep and occasions of this kind are not the only times he thinks about them, he mentioned that just recently he had prepared, personally, an additional section to his Annual Report in which the forest situation and its needs are discussed.

JEFFERSON WAS A SOIL CONSERVATIONIST

"We now plow horizontally following the curvature of the hills and hollows on dead level, however crooked the lines may be. Every furrow thus acts as a reservoir to receive and retain the waters;....scarcely an ounce of soil is now carried off....In point of beauty nothing can exceed that of the waving lines and rows winding along the face of the hills and valleys."

--Letter from Jefferson in 1813 to Charles W. Peale

COMMENTS ON "NEW KIND OF FOREST SERVICE"

By Arthur Bevan, Tropical Forest Experiment Station

We have read with intense interest Hall's article in the July 8 issue of the Service Bulletin under the above title. The similarity between the conditions of the hill farmer he describes so aptly and those in the hills of Puerto Rico is striking, except that perhaps all of these conditions are accentuated here. It is true that the hill farmer or "jibaro" as he is called down here, has fewer needs in the tropics or semi-tropics where food is the one all engrossing problem.

We do not believe that the "Forest Service Tenant Program" described by Payson Irwin will meet the problem presented by Hall, and it certainly does not meet the problem here. The Puerto Rico Reconstruction Administration has tried such resettlement programs and, while we in no way decry such projects, they do not meet the problem of the hill farmer. The man Hall is talking about and our "jibaro" in Puerto Rico does not want to be moved, he wants to live in the hills, which is his home and the home of his forebears for generations before him.

The Forest Service here is trying to solve this problem and at the same time build up the forest resources so that these people may eventually become self supporting. Already about 1,000 families have been established on forest lands owned by the National, P.R.R.A., and Insular Forests. Most of these hill people would have had to be dispossessed without any place to go and in an Island where population density is over 500 persons per square mile, the plight of these people would indeed be desperate. The rehabilitation of such families on forest land is known as the "Parcelero" system. Under a definite contract a parcel of land is allotted which must include two or three acres capable of growing subsistence crops, on the remainder of the area the parcelero agrees to tend the forest trees that have been planted or he will plant. Hoe crops are also grown between the tree rows while they are small. From one-third to one-half time of work on the forest roads, trails, T.S.I., etc., is found for the parcelero. The Forest Service using CCC builds a house, usually two-room and kitchen with thatched roof and a properly located outside toilet. So far so good, but what of the future, we cannot and dare not consider "made" work to continue the support of these forest families indefinitely. The whole objective is to eventually make them self supporting. Hall says they must "derive" cash income from labor in the forest and on the products of the forest". This sounds simple, but in practice if we are going to meet the problem to have that "new kind of Forest Service", we must be free to administer the forest in a practical manner.

Under present regulations except for free use permits, all products of the National Forest must be sold. Legislation to permit the sale of small lots of timber without competitive bids now exists. This, however, still requires the payment of cash; we cannot even sell thinnings except for cash, and these people do not have any cash. They are expert woodsworkers, in fact they have fought the woods all their lives and yet except as laborers they have no way in which they can work in the woods now or in the future. No way in which they can share in the stake.

If it requires legislation then we must have legislation to permit these people to work in the woods on shares. The making of charcoal, cordwood, stakes, fence posts, ties, poles, piling, and even lumber should be possible on an equitable share basis. The limitation on such "share" sales could be quite low and restricted to bona fide settlers within the Forest.

In addition to the stumpage return obtained by the Forest Service from its fair share of the output, it would be possible to accomplish a large amount of T.S.I. at little or no cost to the government.

Such authority granted to the Forest Service would go a long way toward solving our parcelero problem, and I would not be surprised to learn that it would be a long step forward in a solution of Hall's problem.

THE FOREST SERVICE IN UTAH

By Ernest O. Buhler, Washington

In travelling through Utah, one is impressed with the good feeling that exists between the people of Utah and the Forest Service. This relationship of good will has been observed in instances such as the following:

Several counties have expressed their willingness to forego the 25 percent annual revenue due them from prospective National Forests if that 25 percent revenue would be applied toward purchases for additional lands for the National Forests.

The citizens of Logan wished to acquire some 300 acres known as White Pine Lake Area for their outdoor activities. They raised money to purchase this land and then deeded it to the Forest Service with the understanding that the Forest Service would improve it. Several other communities like Brigham City and Ogden have also purchased lands with their own money and then deeded them over to the Forest Service.

A notable example is the community of Willard. It had been plagued by a series of disastrous floods which were a result of poor watershed management. The outraged citizenry got together for the purpose of raising money to buy 3,000 acres of protection forest lands located on its watershed. The money was raised from donations from private citizens, civic clubs, the City of Willard, the county in which Willard was located and the State Highway Department. They finally raised enough money among themselves to purchase this acreage so that it could be placed under proper watershed management. The interesting side light to this story is the fact that after the lands had been purchased, they gave a deed to these lands, free of charge, to the Forest Service, if the Forest Service would take over the management of the property. This was done. The land was deeded over, the Forest Service took charge, and, since that time, Willard Canyon has not produced any disastrous floods.

This expression of good will is also evident as one drives along the highways and byways in the green Forest Service car. It doesn't make much difference who is in the car--when they see it coming, very often they will wave at you a cheerful "hello."

The contrast of attitudes in Utah where the Forest Service is old, tried and found true and in other States where the Forest Service, accomplishment-wise speaking, is still young, is refreshing. This condition in public relations is a confirmation of the old saying that "the proof of the pudding is in the eating of it". However, now that the Forest Service people in Region 4 have gained this confidence in such a fine measure, they are also confronted with the challenge of keeping it.

The achievement earned by faithful and efficient performance is not like a permanent trust fund--protected from danger and safe for the enjoyment of the heirs. It is rather a vulnerable possession, subject to competition, attack and slander and if it was difficult to win this prize, it will not be easy to have and hold it.

THE CHIPPEWA BLOWDOWN

(Extracts from Report of August 8, 1940, by H. Basil Wales, R.9)

"At 4:00 a. m. on July 24 a windstorm, approaching hurricane proportions and accompanied by heavy lightning and rain, hit the Chippewa Forest on a belt twenty to thirty miles wide, and extending on either side of Cass Lake from Big Lake on the north to Leech Lake on the south. It apparently originated in North Dakota, and it is known that it traveled from Crookston on the State line to Cass Lake in less than two hours, thus indicating a rate of travel between sixty and seventy miles per hour. The storm continued across the Chippewa in a direction a little south of east, and on across Minnesota and northern Wisconsin and Upper Michigan. I was on the Ottawa Forest at a point east of Watersmeet when the storm passed overhead at 9:30 a. m. The airline distance between Cass Lake and Watersmeet is nearly 300 miles. This gives another indication of the rate at which the storm was traveling, although at Watersmeet the ground velocity of the wind was probably not over 20 to 25 miles per hour. The clouds, however, appeared to be rolling much faster than the ground velocity of the wind would indicate.

"Wherever mature or overmature timber stood in the path of the wind, exceedingly heavy damage was done to the stand through direct windthrow or breakage in the tops. Young, thrifty stands, even up to 125 years of age (as in the red pine stand around Lake Thirteen) stood up exceedingly well. Obviously, the so-called ten-section unit which supports a virgin stand of red pine suffered heavily. In the immediate vicinity of Norway Beach fully 75 percent of the trees are down, or have been 'root-sprung' to such an extent that felling will be necessary as a matter of safety. Back away from the immediate vicinity of the beach and around Pike Bay the loss will probably reach 50 percent. The loss on Star Island was tentatively estimated at about 50 percent, but I would hazard a guess that it will reach higher than that. For some reason or other, the scattered seed tree loss will probably not exceed 25 percent. The overmature stand of jack pine on Star Island is almost a total loss, and the jack pine stand west of Pike Bay is probably 50 percent down. Jack pine losses in the Nushka Hills country and the Mississippi Rapid country on the Bena District are exceedingly heavy, in some cases approaching 100 percent.

"Summer homes suffered considerably, varying from zero up to practically a 100 percent loss in at least one case. It is, however, remarkable that there was no immediate loss of life either in the recreation cabins or on the camp grounds. The Pike Bay and Bena CCC camps were in the path of the storm, but escaped damage except for an unoccupied barracks at the Pike Bay Camp and the garage at that point.

"Immediately following the storm, the CCC forces were enlisted in clearing out roads to release campers and summer home people, and in reconstructing the telephone lines for protection purposes. By the time I reached the Forest the telephone system was again in working order, although it will still need some additional work, and the main road had been cleared. During the week I was on the Forest, many of the other roads and fire ways had been opened to travel. Supervisor Knutson took immediate action to step up the manning of the fire towers one point in the fire danger rating scale. Approval was secured from the army's district commander to the moving in of men from the Walker and Remer camps, and from the Cutfoot and Rabideaux camps for a temporary period until the roads and fire ways had been opened.

"Up to the time I left the Forest the estimate of timber to be salvaged (reduced for defect and damage resulting from splitting and cracking) was a little over seven million feet on the Cass Lake District, not including Star Island, where a rough preliminary estimate indicates approximately two million feet. The loss in the scattered seed tree stand and in the vicinity of Birch Hill had not been covered by cruise.

"On the Bena District, the estimate covered over four million feet of timber, principally jack pine, and it was anticipated that the total estimate will be over nine million feet. A great many inquiries were being received as to the availability of the windthrown timber for sale purposes, and it is anticipated that we will not have any very great trouble in disposing of 80 percent to 90 percent of the timber. At least, a great many small operators will be willing to pick up much of the scattered seed tree material and the small 'islands' of windthrown and broken jack pine at very fair prices, at least equal to the minimum price for the species, except possibly for jack pine pulpwood, which must now be harvested as rough pulpwood."

INSTRUCTION OF CCC IN PREPAREDNESS ACTIVITIES

By G. H. Lautz, Washington

The following information was secured from Superintendent of Construction Powell, in charge of the Sheridan Dam Construction Project on the Harney National Forest in South Dakota, regarding the training given the CCC boys which would be of great value in defense training.

Out of 1,200 CCC boys enlisted since the work began on August 18, 1938, to July 1, 1940, 1,025 have received training in work which would be of value in defense activities, as follows:

Truck drivers	620
Caterpillar and tractor drivers	153
Mechanics	105
Powder men	15
Jackhammer men	78
Compressor men	22
Concrete men	32
	1,025

The caterpillar and tractor drivers and the jackhammer and compressor men are no doubt duplicated in the 620 listed as truck drivers, since each truck driver is usually given previous experience in the other three activities. These boys have all had a good deal of experience in the various kinds of work specified. The amount of work accomplished at this dam by the men listed above is:

Yardage of dam	110,000 cu. yds. excavation
	550,000 cu. yds. earth fill
	1,500 cu. yds. concrete
	15,000 cu. yds. rock riprap

This represents the work at only one CCC Forest Service Camp and would naturally be multiplied to a more or less extent by the number of camps controlled by the Forest Service in their construction and improvement work. This one example demonstrates clearly how the Forest Service has been and is now developing men in activities needed in preparedness.

RECENT CORRESPONDENCE REGARDING CONDUCT OF LAND ACQUISITION TITLE WORK

To Assistant Attorney General Littell from Mr. Kneipp under date of July 2:

"In our efforts to salvage all we could out of the unconsummated cases payable from the expiring appropriation for the Fiscal Year 1938, the Forest Service during the past two months has made rather heavy and perhaps unreasonable demands upon Messrs. O'Brien and McDonald, Direct Purchase Section, Title Division, and Mr. Hasson, Condemnation Section, Title Division, of your office. Their quick response, their sympathetic and constructive cooperation, resulted in the consummation of a considerable number of cases which otherwise would have lapsed. For all of this the Forest Service is deeply grateful and extends its sincere thanks."

To Mr. Kneipp from Assistant Attorney General Littell under date of August 16:

"Your letter of July 2 arrived during my absence from the city and by inadvertence has only been brought to my attention. I am very glad, indeed, to read your comments in regard to the work of Messrs. O'Brien and McDonald in the Title Section and Mr. Hasson in the Condemnation Section.

"I have tried to develop and maintain here the feeling that the Title and Condemnation Sections exist to serve the acquiring agencies of government, and toward that end that we should give the maximum of cooperation and speed in our work. Statistics show that we have very greatly increased the speed of our title work and relaxed some of its rigors, which I discussed with you quite some time ago. The condemnation mill is clocking nicely, also. I am holding a stop-watch on both sections.

"Your letter with other comments which I have received from other agencies also leads me to believe that the spirit of service and the desire to meet your problems and those of other agencies as quickly as they arise and as the need of the occasion dictates, is also present to a measurable extent. It is gratifying to have your letter and I thank you for it."

A SECOND PROBLEM STILL UNSOLVED

By Paul W. Bedard, New England Forest Emergency Project

"The Supervisor Solves A Human Equation" which appeared in the June 24 issue of the Service Bulletin is very interesting and timely, and most eloquent in what is left unsaid as well as in the facts presented.

It would appear that if in such a case as described by Mr. Thompson, two years are required to become aware of, and another year to partially solve, an individual problem which is not unusual and which was a natural, almost certain result of such circumstances, then indeed our standards of training and supervision of new employees are badly in need of a critical analysis.

In reviewing the circumstances of this case as outlined by Mr. Thompson, the fact that the problem was permitted to develop at all seems rather surprising. What else was to be expected? A year's CCC experience to back him and John Doe is given primary responsibility for a not inconsiderable ranger district at a critical time. Training? Three or four days with the former Ranger and an early visit by the Assistant Supervisor! Small wonder poor John Doe is found to be slow to make decision on his own responsibility. For this slowness he is criticized, although such an apparent defect when interpreted with his other qualifications, ("He was thorough and accurate and possessed real technical ability") would seem to have done all but shout that a lack of training was the basic reason for the unsatisfactory condition.

Finally after two years the realization comes, "that possibly the major reason for his failure was his lack of proper training for the job or on the job". But even then still more time must elapse and more inadequate gestures be made before the correct solution is eventually applied.

It would seem, in this case, that the use of the words failure and incompetent to describe John Doe during the period of his mishandling amounts almost to an impertinence. We may justifiably criticize a new employee for his lack of response to proper training correctly applied; but when lack of training is involved whose failure is that? Is the new or promoted employee expected to point out his training needs and to request them of his supervisor?

Not only, as Mr. Thompson so truly states, do we need better standards for the training and supervision of new employees, but also we evidently need a greater supervisory alertness to our training responsibilities and a greater initiative in seeing to it that proper training is given before such problems develop.

EFFECT OF TIME OF CUTTING TIMBER ON ITS DURABILITY

Many of the theories which have been advanced regarding the durability of wood attribute too much importance to the time of cutting. As a matter of fact, the time of cutting has very little effect upon the durability or other properties if the timber is properly cared for after it is cut. The method of handling posts, poles, and logs at different times of the year, however, does influence their durability.

Posts, poles, and other rough products cut in late spring and early summer are more likely to be attacked by insects and fungi because the wood is freshly cut and in the most favorable condition for attack at a time when insects and the spores of fungi are most active. Seasoning also proceeds more rapidly during the warmer months and may cause excessive checking. If the wood is peeled when cut and piled openly on skids for seasoning opportunity for decay will be reduced to a minimum, but checking will not be retarded. In no case should the wood be allowed to lie in direct contact with the ground. If checking is an important consideration it can be reduced somewhat by locating the piles in a shaded but dry place. The bark peels most easily in the spring. It can be removed at any other time of the year but the labor and expense will probably be greater.

Timber cut in late fall and winter seasons more slowly and with less checking than during the warmer months. When proper storage or handling is impracticable, winter cutting is best. Fungi and insects do not attack wood out of doors in cold weather, and by the time warm weather arrives the wood is partly seasoned and somewhat less susceptible to attack. It is for this reason that winter cutting is advantageous and not on account of a small amount of moisture or sap in the wood in winter as the popular belief has it. There is practically no difference in moisture content of green wood in winter and summer.--Forest Products Laboratory, Technical Note.

REVIEW OF "OUR FORESTS" BY DAVID CUSHMAN COYLE

"Our Forests" is the title of a recent book by David Cushman Coyle, prominent economist. The 150 pages of this little book are crammed full of significant forestry facts and figures, Presented in a very interesting and forceful manner. In the words of Harry Slattery, who wrote the foreword, "It tells, not in alarmist tones but quietly and factually, the problem we face. It tells of the work being done by the Federal and local agencies and suggests other steps to be taken from these good beginnings. Much is to be done if we are to face the future with strength. This book brings us up to date on forestry - lest we forget."

The author dedicates the book to "the man who inspired it and encouraged the writing of it, F. A. Silcox, Chief Forester of the United States, who died in the service of his country. Sil's friends speak often of him, but we do not talk much about him, feeling that words do not serve us well. He was a man who loved forests, and his mind was like a forest clearing on a northwest day with a clean wind blowing through it. He was a man of such integral courage that one trusted him always without question, and his companionship was a delight both high and deep.... If you are so fortunate as to know a good white oak in its vigorous middle years, standing on a rocky hillside in the wind, turn aside as you pass and lean with your hand against it. We who knew Silcox knew a man who stood like an oak until the lightning bore him down."

The book is issued by the National Home Library Foundation of Washington, D. C., as part of a non-profit program to make good books available at the lowest possible price. It is paper covered, size 4¼ x 6½, and sells for 25 cents per copy.

BREWERS BOOST FIRE PREVENTION CAMPAIGN

By Emma H. Morton, R.6

When Ranger E. H. Gordon, of the Mount Hood Forest in Oregon, isn't practicing forest fire prevention officially, he's preaching it personally. While on his vacation last spring, Gordon met Peter Schmidt, President of the Olympia Brewing Company, Tacoma, Washington, to whom he preached so convincingly that Mr. Schmidt became imbued with the desire to help. His contribution to the cause is a fine one - on one million beer cases, which will be distributed throughout the Pacific Northwest, Nevada, Alaska and Hawaii, he had printed a highly colored picture of a forest fire with the slogan "Prevent Forest Fires - It Pays". Mr. Schmidt, in telling of his action, states: "Because many visitors from other States, where people are not forest fire conscious will see this message, it has special value. Such people often do not think of danger when they throw a lighted cigarette out of the automobile or are not careful in extinguishing their camp fires.

"Because our beer cases are made of fibreboard, manufactured from Oregon and Washingto forests, the slogan 'Prevent Forest Fires - It Pays' has a deep significance to citizens and manufacturers of the Pacific Northwest. If our forests are burned it will be more expensive to package our food and other supplies."

But the story doesn't end here. The Blitz-Weinhard Company of Portland, has just sent the Regional Office a sample of gummed paper tape bearing the appeal in 1¼ inch red letters: "Help Prevent Forest Fires." J. M. Rothchild, an officer of the Company states that the tape is being used on the outside of every case of Blitz-Weinhard beer. He says: "We trust there will be some effective results from this little bit that we are adding to the general fire prevention activity and which, of course, we are happy to do. We will continue to use this tape on the outside of every case of our beer during the fire season."

Perhaps other Forest Rangers might get similar cooperation from manufacturers in their zones of influence. How's this for a slogan - "We'll Get Brewers to Boost for Fire Prevention - or Bust". Maybe Ranger Gordon could be persuaded to tell how it's done.

KANSAS FINDS THAT JOB ANALYSIS ON THE SHELTERBELT IS WORTH THE CHIPS

By T. Russell Reitz, Prairie States Forestry Project

We have tried job analysis in Kansas since May and it appeals to me as a very worthwhile tool to use in bettering our work. To date, analyses have been completed in four Districts and three Subdistricts. In every case, we have learned something about our duties and I believe we will do our work differently and better.

It isn't very hard to complete an analysis. The tabulation can be completed in about one and one-half days and the recommendations completed in about one-half day more. We did not expect to find everything wrong nor to revolutionize a man in his job. We hoped and felt that if we could convey even five or six suggestions for change the analysis would be worth while.

As a consequence recommendations have been on the following general lines:

1. Reduction of total time worked to 2,600 hours for a year, including full allowance for annual leave.

2. More emphasis on training and inspection, particularly in certain activities.

3. More emphasis on effective I & E work as a basis underlying other activities.

4. Bolstering up of the functions of the monthly District meetings to make them more helpful to Subdistricts.

5. Relief of Subdistricts of duties clearly falling in the responsibility of the District Officers, and relief of District Officers of duties clearly the responsibility of the Subdistrict Officers. (The State Office will also do things differently because of these analyses.)

In individual cases certain details are studied as occasion demands. I think in our last Subdistrict analysis, the Subdistrict Officer very nearly prepared his plan of work on the basis of the work load analysis.

The last analysis has been our best one. Experience is necessary to good analysis. I hope to see this unit complete this job for all field men by January 1, 1941. The forms prepared by Operation are good. Based on seven analyses, I would suggest only a few changes.

This work is commended to all who will have occasion to use it. I feel sure that it is a timely matter on the PSFP now. -- From "Plains Forester"

THE EDITOR DISCOVERS

The nominations of Claude R. Wickard to be Secretary of Agriculture and Paul H. Appleby to be Under Secretary of Agriculture were confirmed by the Senate on August 23. Mr. Wickard has been Under Secretary of Agriculture since last winter, when he succeeded M. L. Wilson, who was made Director of Extension Work. Mr. Appleby has served as an Assistant to Secretary Wallace since he entered the Cabinet in 1933.

Mr. Wallace has resigned, effective September 5, to begin active political campaigning.

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An Order establishing the "Bob Marshall Wilderness Area" within the Flathead and the Lewis and Clark National Forests, Montana, was signed by Secretary Wallace on August 16. This Area, established to commemorate the name of the late Robert Marshall, Chief, Division of Recreation and Lands, was formerly designated as the South Fork, Pentagon, and Sun River Primitive Areas. It will contain approximately 950,000 acres and will be administered in conformity with Regulation U-1. This country is one of the first in which Bob Marshall made his explorations and hikes. The name "Bob" Marshall was used rather than "Robert" because it is believed he would much prefer to be so remembered.

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With the work load diminishing somewhat, the New England Forest Emergency organization is being reorganized to the extent of doing away with the State Directors' offices, moving the work heretofore done in those offices into the Boston office. A slight increase in personnel in the Boston office will be required to take care of the additional work load.

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Four hundred especially picked CCC enrollees sailed for Alaska on August 20 to build an airplane landing field or stage for the U. S. Army at Metlakatla, 20 miles from Ketchikan. The Army transport which took the boys North also carried portable barracks and other buildings to house them. The enrollees had to agree to remain one year.

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A recent issue of the "New York Times" contained the following story:

"Fire protection and wise use of the axe on 515 acres of cut-over timberland netted its owners $5,100 in seven years. G. G. and Sime Singley of Silas, Alabama, bought the tract in 1933 for $900. They posted the land, kept out forest fires, and cut out defective and diseased timber. Last year they sold the tract for $4,500, a net profit of $3,600. The new owner sold the timber to a sawmill for $6,000, or a profit of $1,500."

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Region 2 writes: "The Supervisor of the Rio Grande National Forest is very much distressed because in the article on the top of page 10 of the July 22 issue of the Service Bulletin, it is stated that the resources of the San Juan National Forest are portrayed as tourist attractions, etc. The San Juan National Forest is located on the Western Slope of the Continental Divide adjacent to the Rio Grande National Forest. Many of the forest pictures in the

VALLEY EMPIRE were taken on the Rio Grande National Forest and the descriptions on the inserts were largely written by members of the Rio Grande National Forest staff. This was an excellent piece of cooperation, for which the Supervisor of the Rio Grande and his staff should receive full credit."

The Editor agrees with the Region that this is an excellent piece of cooperation and had no intention of taking any credit away from the Rio Grande. We hope the Supervisor will accept our apologies.

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"The Pilgrim Highroad" for June - a magazine for young people published by the Pilgrims Press, Boston - contains a series of daily devotional studies by Reverend Jack Warford of Albuquerque, New Mexico, entitled "Green Cathedrals." In the preparation of the material the author "acknowledges the help of numerous friends of the U. S. Forest Service, especially Major Evan Kelly, K. D. Swan, L. A. Campbell, J. D. Jones, and Rex King." This issue of the magazine is to be distributed widely in summer conferences of young people throughout the country. The studies contain a number of "practical suggestions" on care with fire in the woods, preservation of wildlife, and other conservation subjects. Examples:

"Be informed. Learn what is happening to our natural resources, forests, minerals, lands, and what is to be done about it. Then help to educate all your friends.

"Keep in friendly contact with public officials: senators, congressmen, governors, mayors. They are busy people and will appreciate the suggestions of thoughtful, intelligent citizens who take their citizenship seriously.

"Remember, there are always some people who would exploit everything and conserve nothing. Help to curb them."

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The Hotel President - one of the Dreier Hotels - located at 234 West 48th Street, New York City, is offering Government employees special rates on the following all-expense tours:

Four-Day Tour .... $11.70 per person (regular price $13.95) Includes room, with private bath and radio, for 4 days and 3 nights; 2 days' breakfasts in main dining room; admission to World's Fair, and certain sightseeing and entertainment concessions.

Three-Day Tour .... $8.80 per person (regular price $10.45). Includes room, with private bath and radio, for 3 days and 2 nights; 2 days' breakfasts; admission to World's Fair; and certain sightseeing and entertainment concessions.

Two-Day Tour .... $4.90 per person (regular price $5.75). Includes room, with private bath and radio, for 2 days and 1 night; admission to World's Fair; and certain sightseeing and entertainment concessions.

Further information may be obtained from Dreier Hotels, 143 West 49th Street, New York City.

BICENTENNIAL CELEBRATION OF THE UNIVERSITY OF PENNSYLVANIA

Three members of the Forest Service are slated to appear on the program of the Bicentennial Celebration of the University of Pennsylvania, September 16 to 20. Subjects ranging from soils to fine arts will be discussed in a series of addresses and symposia. The provisional program of 23 pages lists the following symposia which are of special interest to foresters.

GENERAL SUBJECT: Some Fundamental Aspects of the Problem of the Conservation of Renewable Natural Resources.

I. First Symposium, Tuesday forenoon, September 17, 1940.

Subject: The Original Vegetation of the United States as a Guide to Present-Day Agricultural and Forestry Practice.

Chairman: Raphael Zon

Principal Speakers: G. A. Pearson
W. S. Cooper
H. L. Shantz

II. Second Symposium, Tuesday afternoon, September 17th.

Subject: Climatic Cycles in Relation to the Theory and Practice of Conservation.

Chairman: C. G. Abbott

Principal Speakers: Paul B. Sears
A. E. Douglass
One other to be invited

III. Third Symposium, Wednesday forenoon, September 18th.

Subject: The Responsibility of Federal, State, and Local Governments in Conservation: How can an Effective National Program be Organized and Administered?

Chairman: Morris Llewellyn Cooke

Principal Speakers: S. T. Dana
Henry Wallace (final acceptance not yet in hand)
One other to be invited.

CCC CONSCIENCE

The U.S. Treasury recently received $5.00 as a contribution to the "Government Conscience Fund." With the remittance was the following unsigned letter:

> "For 2 single-jack hammers and 1 kerosene lantern, stolen from CCC camp on Baseline Avenue, Boulder, Colorado, winter of 1932 or 1933."

The sender of the letter did not say whether or not he was a former CCC enrollee.

UNITED STATES DEPARTMENT OF AGRICULTURE
U. S. FOREST SERVICE
Washington, D. C.

Advice of Personnel Action

EMPLOYEE'S COPY

CAUTION! This letter, while evidencing an appointment as of the date thereof, is not to be accepted as a credential for operating. Any person approached by the holder is entitled, on demand, to view his regular departmental credential in the form of a badge or a current identification card.

Action No.:

Mr. Henry Agard Wallace, Forest Service

This is to notify you of the following personnel action:

NATURE OF ACTION: Exceptional appointment

Position, Grade & Salary: Honorary Forester

Appropriation: A sum worthy of the cause

Official Headquarters: Wherever you may be

Legal Residence: Iowa

Effective Date: Sept. 1, 1940

Date of Birth: Oct. 7, 1888

C. S. Authority:

Remarks: In recognition of outstanding service to the end that the furrow of the plow and the sound of the axe shall spell life, not death, to our resources, that the law of the soil shall consist of that understanding use which is the greatest safeguard to all of us for all time.

This action is subject to the provisions of paragraphs indicated below:

(a) *Under this appointment you are subject to the provisions of the Civil Service Retirement Act as amended, and accordingly 3½% will be deducted from your basic salary for deposit to your credit in the Retirement Fund*

(b) *This appointment is subject to taking the Oath of Office (Standard Form No. 8) which should be submitted to the Department Office of Personnel through the Chief of your Bureau or Office.*

(c) *This appointment is subject to completion of the Personal History Statement (Standard Form No. 6), which should be submitted to the Department Office of Personnel through the Chief of your Bureau or Office.*

(d) *This appointment is subject to completion of Personnel Questionnaire (Form No. AD-125), at the end of fifth month of service. This form should be submitted to the Department Office of Personnel through the Chief of your Bureau or Office.*

(e) *Retention in the service after the expiration of your probationary period confers permanent Civil Service status upon you.*

[✓ (f)] *This appointment is for the duration of the work.*

(g) *This appointment is for the duration of the emergency work, but not beyond June 30 of the fiscal year in which the appointment is effective.*

(h) *This appointment is for such time as your services may be required and funds are available for Civilian Conservation Corps work.*

By direction of all true conservationists:

Respectfully,

Earle H Clapp

Acting Chief, Forest Service

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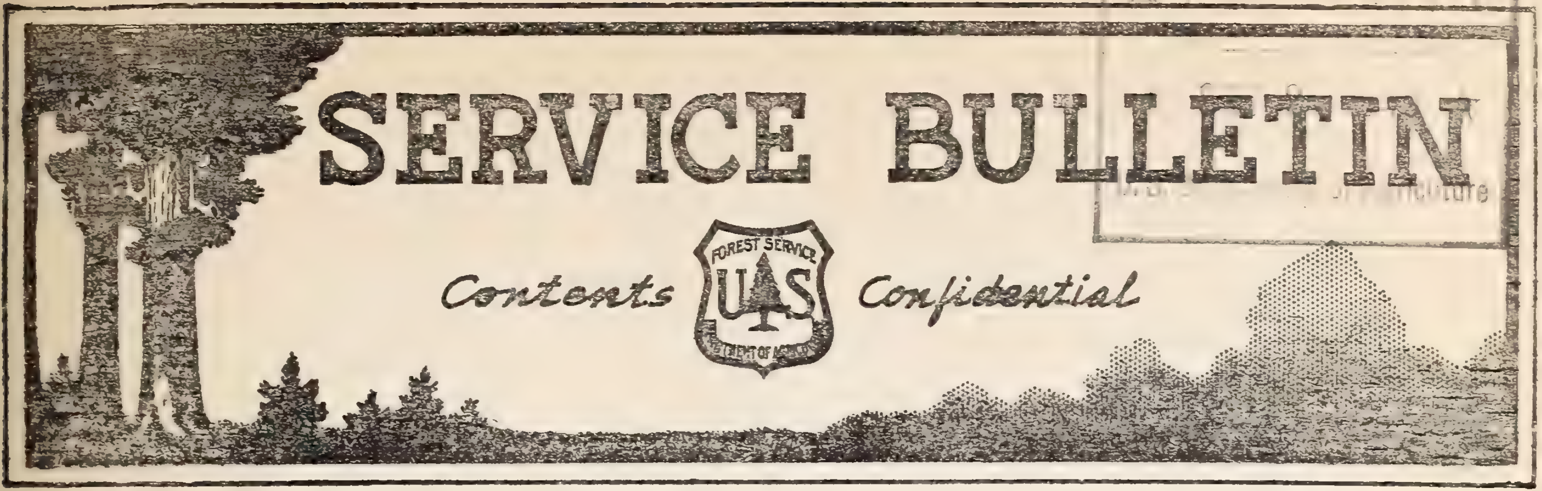

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 19 Washington, D. C. September 16, 1940

THE FOREST SERVICE STAKE IN THE RURAL HOUSING PROGRAM

By Frank J. Hallauer, Washington

Most members of the Forest Service know of the existence of the Central Housing Committee as an agency for coordinating various Government activities in housing. After some five years devoted almost wholly to urban housing, the agency is now extended to include rural housing by the addition of the Central Housing Committee on Rural Housing with M. L. Wilson as Chairman.

A get-together meeting was called by Mr. Wilson on August 5, at which time the various Government agencies were given an opportunity to state in 5 minutes what each was doing or hoped to do in the rural housing field. Some ten agencies in the Department of Agriculture were represented and about an equal number of others.

The Forest Service interest in rural housing was represented as threefold. First, there is the fact that rural housing is predominantly low cost and of wood construction. Research of the Laboratory having to do with the properties and uses of wood has direct application to such construction. To illustrate research on a particular problem, there was cited the development of the plywood unit for prefabrication where prefabrication is the answer to low-cost construction.

Second, there is the Forest Service work on farm woodlands which constitute say 30 percent of all farm acreage east of the Prairie States. If we extend farm housing to include farm buildings, then the farm provides a market for almost a third of our lumber production. The two go together. The farm needs the building market as an outlet for its products and the farmer needs wood products for his buildings.

Third, there is the heavy concentration of low-income farm families, of subsistence farms, of poorly housed rural families, in or adjacent to areas with a high ratio of forest lands. Attention was called to the anomalous situation of inadequate housing where building material was in abundance. A southerner at the meeting compared this with the situation in which the people who grow our textile materials are poorly clothed. That the forests can contribute directly to the problem as a source of employment and as a source of material for construction was illustrated by rehabilitation work for families stranded within National Forest boundaries and in two communities developed with the Resettlement Administration.

Unfortunately, time cut the conference off just where program discussion was to start and a major topic for discussion was to have been self-help. The term self-help is somewhat of a misnomer in that it suggests "do it yourself." It is really a program to develop farm resources in labor and materials cooperatively. Aid would be furnished but preferably in guidance, training, and supervision.

An outsider might not think of the Forest Service as an agency for rural housing and perhaps many within the Service do not realize that the Forest Service has a greater stake than any other agency in a farm housing program, particularly on the self-help plan. It is based on these general conditions:

There are 200,000 youths between the ages of 17 and 24 unemployed on the farm. This number is being increased by 50,000 annually.

Efforts to bring industrial employment within reach of the farm have been unsuccessful; but a self-help farm construction program would do that.

Vocational training in rural areas is handicapped for want of practical application, but self-help rural construction can supply that want.

A major problem in farm forestry is markets for forest products, and adequate farm buildings would provide a market for nearly all the farm woodlands produce.

Economic surveys indicate little prospect of cash income available for building being adequate to provide better housing for half our farm families. On the other hand, self-help has provided buildings of high standard with limited cash expenditures.

Native materials include stone, gravel, and clay products, but the primary one is wood. The problem includes development of its use, and harvesting in a way to insure future resources.

A reasonable standard of buildings for all farms would increase the estimated normal consumption of lumber by about 2 billion board feet annually. This is one of the few new market prospects.

Self-help likewise would increase market for other building materials. It does not aim to spend less but to get more construction with the same expenditure and would direct into construction channels many small cash reserves that are otherwise wasted.

Although the meeting did not get to this part of the program, the subject was close to the surface, close enough to break through at times. The first time was in an unscheduled talk on the Penn Craft Community near Uniontown, Pennsylvania, where the Friends Service Committee has helped stranded miners to establish themselves on small acreage part-time farms. These miners, through cooperative self-help, have built themselves houses of local stone, 4 to 6 rooms with bath, appraised at $4,000 to $5,000. A loan of about $2,000 leaves $2,000 to $3,000 for an average of little more than 2,000 hours labor, or over $1 per hour. What low-income farm family would not be glad to earn a dollar an hour, or even 25 cents an hour, for spare time?

Self-help again made itself felt when T. M. Campbell of Tuskegee told of his experience with colored farmers. "I hear a lot," he said, "about bringing trained labor from the city to build us farm houses. Don't do it. We have plenty of labor." He also took exception to the general opinion that low incomes or lack of cash explained the poor housing of negro farmers. The problem was to cultivate desire, to put as much emphasis on housing as on care of livestock and equipment.

There are individual cases, such as the colored family of 7 that had never lived in anything better than a three-room shack moving into a seven-room, stone veneer house built with its own labor, using timber from the farm and stone picked up from the fields. Of course, there was a county agent back of it.

The Extension Forester cites any number of cases where families with cash resources of a hundred or two hundred dollars have been able to build homes they were proud of, that were valued at over a thousand dollars.

What is needed is a demonstration of the greater effectiveness of self-help on a community basis with the opportunity for cooperative exchange of labor and materials. With a self-help program, the prospect is that forestry can be a major agent in solving the problem of better housing and providing a higher standard of living on farms.

"SCIENTIFIC" MANAGEMENT VS. "PAPER WORK" AND INSPECTION

By Peter Keplinger, Washington

Recently in the Forest Service we have had campaigns to reduce paper work, and now two Regions have made studies indicating that there has been too much inspection. Steps, I presume, will be taken to reduce the amount of inspection just as has been done for paper work. Is that the way we would normally approach a factor of a timber management plan? Instead of arbitrarily changing a factor which may appear out of line, do we not try to get some fundamental data and base our change on facts? Why not do the same in administrative management?

How much inspection is needed? The correct answer to that question involves many fundamental factors, but the one I want to consider here is this: Inspection is not a thing in itself but is one of a number of factors contributing to a single purpose. In the Secretary's training policy statement, this purpose is called "control", so I am using that term. In good administration the managing executive must have control of operations; he must control quality, quantity, time, and cost. He inspects as one means of keeping control of all these factors, but primarily for quality. Other means commonly used are standards, schedules, reports, and records. How much of any one is needed depends on how much of the others you use. There should be a system established that will keep the man responsible in continuous touch with what is going on; he must know that work is up to standard in quality, that the quantity is satisfactory, that things are done at the right time, and that each employee under him is being used to best advantage.

In the beginning the Forest Service had no plans and no standards with which to plan, or against which to measure a job. Therefore, we had to depend a great deal more on inspection than is normal in an older organization. Hence we adopted the general policy that "the man in charge must see everything." The supervisor is still trying to live up to that policy, although he has been forced by necessity to rely largely on other things.

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Having no standards, originally, made it necessary to write long descriptive reports. The early necessity developed into a permanent habit and we still do it. This accounts for much of our paper work. Many organizations have reduced their control reports to a system of short answers and symbols which require little time and paper. But the reports needed likewise depend on other factors. It is control that the executive must have, not reports.

Control is a generic term that is used in many ways and without exact meaning in management. Some writers make it as broad as management itself. This would include planning. But more commonly, it is considered to come after the objective is determined, the plans are made, and standards established. The manager has a job to do according to plan and standard. To assure himself that it is so done and on time he inspects; also he establishes operating budgets (allotments to rangers), he has cost records kept, he analyzes expenditure records, he uses also statistical records, he requires reports of various kinds, he analyzes complaints, he consults customers and cooperators; and from all of these he gets an idea as to how things are going. After this is done, in order to make best use of his own time, he follows the so-called "exception principle" and exerts his own energies not where everything is o.k., but on the exceptional case where things are going wrong. In this way he has time to take care of the difficult jobs that need extra attention.

But to come back to control: This proposed method requires a plan in which all factors are properly blended so as to give the best control at the least expense. This blending cannot be done once for all time. The situation changes. The needs change with it. Periodically, therefore, the system should be reviewed, studied, and revised. Our system, and particularly our policy, seems to suffer now from a carry-over from a situation that prevailed years ago. It cannot be corrected piecemeal. A change in inspection should be balanced by a counter change in something else. The supervisor (with help) should ask himself: "How can I keep currently in touch with quality, quantity, and time on all districts and for all functions?" Also: "How much information do I actually need in order to meet my responsibility?" List all the answers. Then work them over into a plan, to prevent gaps or overlapping. It would require considerable study of techniques to get the best possible plan but not much to improve on what many supervisors now have.

(Mr. Keplinger's article is thought provoking and should prove stimulating to the majority of our field officers. Who has any ideas on "Paper Work" and "Inspection?" Just how far should we go in the reduction of reports? Is inspection overdone and are there too many layers of inspection? Are present reports and inspection truly burdensome to the field or are they just bugaboos or good alibis? If you have any comments or suggestions, send them, under the heading "Comments on Keplinger's Article", directly to the Chief, Forest Service, and they will be given careful consideration. Operation is anxious to secure a cross section of the field's viewpoint on these basic vital problems which affect the day-to-day functioning of the Service. - Ed.)

IN TUNE WITH THE TIMES

By George E. Griffith, R. 6

In times such as these, there is a temptation to relax our public relations efforts. We wonder how we can compete with the dramatic, world shaking events which dominate our news and our public thinking.

It is true that the problems we face are difficult, complex. But forestry leadership is demonstrated in action, rather than alibis. Certainly the old bromidic appeals, the trite cliches, will not rate much attention in these epochal times. If we are to keep in step, and justify our leadership, we must get in tune with the times. We must give our public relations efforts a new dramatization, showing how forestry fits in with the tempo of nineteen hundred and forty. How can we do this? By each one of us devoting to the subject his best thought and creative imagination. Here are a few suggestions to start the ball rolling.

How about this country we are going to defend? What would a dictator be seeking, if he invaded this land of ours? Not people, surely, but rather soil and natural resources? That's what all of the trouble is about overseas. So, while we are planning to defend these resources from foreign invasion, let us also give thought to protecting them from our own carelessness, indifference, and greed.

Again: National defense means not only munitions and the implements of modern warfare. It means also, industrial mobilization, and the wise handling of the natural resources which are essential in times of war. It takes no stretch of the imagination to place forest products in this category, and to attune our forestry program to the needs of national defense.

Finally, let's look ahead. After the war, what? Thinking leaders are agreed that the post-war period will bring reconstruction problems such as the world never before has faced. There may be questions as to the future value of the gold supply stored in Kentucky. We may shudder at the burden which the future generations will bear to pay present war costs. Depressions and bad times may be in store. But clear thinking leads to the conclusion that for any nation, recovery will be measured by the natural resources upon which future wealth and employment may be based.

Was there ever a time when there was greater urge for a sound forestry program for this nation? In this thought, we can find ample justification for our Forest Program. And the time to begin is now.

America has been taught to expect constructive, dynamic leadership from the Forest Service. We have not failed in the past. We will not fail now. - From "The Six Twenty Six."

A TULIP (TREE) BY ANY OTHER NAME WOULD SMELL AS SWEET

By Perkins Coville, Washington

My friend George Hepting, whose item on common tree names appeared in the August 19 Bulletin, is a little rough on the Service Tree Name Committee (of which I am a member) for its part in developing the recent "Approved Changes in Sudworth's Check List." A misconception, and an error or two, to say nothing of the fair name of the Committee, call for a rebuttal.

The Committee was given this job and approached it philosophically. In its preliminary material sent to the field and outside agencies for comment, it spoke of an inherent human tendency to resist changes in familiar names. Residents of a town hate to have old street names changed to provide an alphabetical order. As an old-time amateur I regretted the change from "wireless" to "radio" and from "meters" (the way I learned to think of wave length) to "kilocycles." Partly it's mental laziness; partly it's like the subconscious desire to wear the old shoes a little longer, rather than to break in a new pair.

The Committee first of all set up several basic rules or principles for common nomenclature which it would follow as nearly as practicable, and these have been made public. One of these was to give every native tree species a common name that is distinct - one that is not used (officially) for any other species.

Hepting is hardly consistent. He says "...we should not call a cherry a maple." Yet he would call Liriodendron a poplar,which it is not. Yellowpoplar, redcedar and honeylocust become new specific common names as nearly similar in connotation to the old names as possible. Can Hepting, except for sentimental reasons, stand up for continuing to apply the name CEDAR indiscriminately to members of the genera Cedrus, Libocedrus, Juniperus, Chamaecyparis, Thuja, and even Cupressus?

The very word "name" denotes some identification, or the distinguishing of one object, person, etc. from other objects or persons. Tree names are not peculiar in this respect. The U. S. Geographic Board probably has odium heaped upon it for changing salty names of places such as Frying Pan Gulch and Hangtown, because there are already too many places bearing those names. There doesn't seem to be much justification for retaining local or regional or colloquial names, much as we may hate to see them go, if they cause widespread confusion.

Another reason for the Committee's work should be reiterated:- namely, that "Standardized Plant Names", which is currently being revised, is the standard of nomenclature for the Department and the Government Printing Office. There would be an obvious absurdity in carrying forward radical disagreement in the two "standards" (The C.L. and S.P.N.)

Hepting, in any event, thinks the changes resulted, so to speak, from a taxonomist's Roman holiday. W. A. Dayton, upon whom fell the heavy burden of preparing the material for Committee consideration, is the only Committee member who could truly be called a taxonomist; and he would be the first to claim that the Committee did not consider a taxonomist's recommendations sacred. The other members had widely divergent backgrounds of education and experience.

Lastly the committee tried to avoid any dictatorial methods by sending its preliminary recommendations to the Regions, Experiment Stations, the Forest Schools and the Trade Associations; by requesting comment; by sending a summary of all comments to each agency; and by careful consideration of the returns. As an end result, however, the committee had to make the decisions and the final recommendations.

EARLY FOREST RANGERS FOUND IT TOUGH GOING

(The following are extracts from a series of articles by Bernice Cosulich printed in the "Tucson Star" during the early part of July this year. The author of the articles prefaced them with the statement: "The oft-hinted but never told story of Fred Winn, Supervisor of the Coronado National Forest is the history of the beginnings of this Service in the Southwest. Romantic, dramatic, sometimes tragic, those early days were filled with uncertainty and failure. But from these early days these Forest Service veterans have hewed that monumental pillar of the Federal Government which has preserved much of what is beautiful and grand and awesome in this southwestern area.")

"When America's forests were first put into reserves it started an undeclared war. No armies drew up in formations to fight, but six-shooters and rifles of cattlemen, miners, timber-men, and squatters were cocked and often in action.... The rangers were thrown into 'a cauldron of trouble', into feuds, lawlessness, disputes and fights. In addition they fought fires, snows, floods and sometimes hunger. They were often weeks away from any expected human contacts. Indians and trappers were frequently their unexpected camp-fellows....

"The beginning of one such career was down in New Mexico where the rock profile of a woman has named the town Magdalena. It was 33 years ago and a tall, bronzed cowboy who was proud of the fact that he had hunted the Lost Adams' diggings was preparing to pull out for the Argentine. Most of his friends didn't know he was a Princeton graduate. The day before he was to leave for the Argentine a Forest Service official, just out from Washington, D. C., hunted the cowboy down.

"'Your name Fred Winn? I'm looking for you. Say, I'm on a spot. Teddy Roosevelt's started this forest reserve idea and I've got to have some men. They tell me you're the only fellow in these parts who can write his name without sticking out his tongue and wiggling his toes,' said the forestry man.

"Long and earnestly they talked that day. Winn - who is now Supervisor of the Coronado National Forest - was all for going on to the Argentine for adventure and seeing something of the world.... But the forester finally won from Winn a promise that he'd stay and help as a ranger for a few weeks if Winn could buy back his string of horses and his saddle. Winn remained to get adventures of which he'd never dreamed....

"'In those early days,' recalls Winn, 'the forest reserves were all west of the Mississippi. They were created in country being lived in by descendants of mountain men, beaver trappers, bear hunters, trail blazers and fighters who had taken the lands away from the Indians by war. They were rugged individualists....

"'Those pioneers used the public domain as they pleased. Life, for them, was the survival of the fittest and the devil take the hindmost. They had range wars and feuds in which they fought just as hard as they had fought the Indians.'....

"Rangers were told they would be killed 'if you set foot on this land again' and one southern Arizona ranger had to kill a man in self-defense after such a threat and drawing of guns. Many another bluffed his way through while his heart stood still as he looked down the barrel of a gun....

"Garvin Smith, now assistant Supervisor of the Coronado, wasn't prepared for the size to which that gun barrel grew that day he looked down Fussy's 'Iron.'.... Smith had told a stockman that hundreds of head of his stock had to be gotten off the forest reserve and had appeared to 'count them through the gate.' The stockman and his foreman, 'Fussy' as the cowboys called him, were there at the corrals when Smith arrived....

"'I don't mind admitting I was scared,' Smith recalls. 'Fussy meant business. I was unarmed, but I stepped off my horse on the far side and tried to reason with them without backing down an inch on Government regulations. That gun barrel looked as big as a saucepan. The stockman's camp cook came out with an axe, but he took my side, argued with his employer that I was right. We counted that stock through the gate and that night I bedded down with that hostile crowd. They fed me, but no one but the cook would speak to me.'....

"'Trying to get old timers, who'd fought Indians and who thought they owned the lands on which they'd settled and made safe for other settlers, to see the idea and ideals of the National Forests was tough going,' Winn said....

"'Uncle Billy' Fourr was one who not only cried out, but staunchly clung to 'my canyon, my mountains' and used the personal possessive for large areas.... In a way the lands were his by right of conquest - that was what made him so 'tarnation' mad. He'd come to Arizona in 1862 and beyond a question of a doubt had fought the Apaches to win the country away from them, make it safe for other settlers. When the Chiricahua forest reserve embraced what he called 'my lands,' he did battle.

"'Uncle Billy' admitted he didn't like fighting the Forest Service, 'I had to do enough of that when the Indians were bad and some of the fights were for this and other land in this Territory. I fought fires in the forests 20 years ago before there ever was a Teddy forager.... I had this land homesteaded and lived on it for 29 years before any of your Teddy Roosevelt tribe came here.... I have given you 40 acres for your forest station. Now if you think you can rob me of my work and improvements, crack your whip - we have laws to govern these things. You can't run me off or bulldoze me. I have a right on this land and will stay with it.'

"Once when sending in a check to pay for his cattle's grazing, he wrote: 'I received a receipt for my money that was stolen from me by letting my cattle graze on Government land. They call it tresspassing. Anybody says I am stealing grass is a liear and no gentleman.'

"For 23 long years Fourr kept up that battle. When he was 94 years old his spunk had not diminished and one day he ordered the Forest Service to take down its forest boundary fence 'from off my pasture.' Only Fourr's death shortly after that closed the 'interminable case.'...

"Strange companions and bedfellows were the experience of every early forest ranger. But the strangest - and nicest - of those whose trail Winn often used to cut in the woods was Ben Lily.

"'Rangers ran into trappers and hunters still living off the land,' Winn said. 'One of these was old Ben Lily, dead now. He was one of the last of the old Bill Williams or old Kit Carsons. Funny old bugger, he was. He'd fought in the Civil War, his pappy makin' lances in his smithy shop. Ben used 'em to run through the Yankees. He used to tell me about those experiences.

"'But I guess Ben went to a southern revival and got religion, or else it was living alone in the woods for so long. He was kind of a fanatic on religion. Even out in the woods all alone he always observed the Sabbath, but it started at 6 o'clock Saturday nights. He wouldn't eat Sundays, would lie spread-eagle under the trees looking up to the sky through their branches. When I've camped with him, he wouldn't bring up water for even his horses, if it ran out on Sunday. Great old boy was Ben Lily. When he showed up at cattle meetings or in town everyone respected him. They loved to hear him tell his famous bear and lion stories. His kind is almost gone,' Winn said....

"They look back now, those early rangers and laugh at things that happened. Ranger A. J. Abbott will never forget a night on the Chiricahuas when he was heading toward a forest fire, his mule laden with canteens and fire equipment. A mountain lion frightened the mule, which jumped out from under Abbott and scattered the equipment far and wide over the mountain. He finally caught the mule in the dark and reached the fire at daybreak, without equipment....

"Those wives of pioneer forest rangers not only could, but had to take hardships, weeks alone at the station, unexpected visits from war-painted Indians, sudden influxes of fire fighters, whom they not only had to feed, but equip and direct for fire fighting when ranger-husbands were away.... It takes steady nerves and confidence in your man to have him gone for two weeks in rough, tough country when you know threats have been made to kill him. Trying to raise children in a cabin remote from doctors and drug stores requires another type of courage....

"Lewis Claud Way, of Oracle, remembers a forest fire long ago on the north slope of Mt. Lemmon. He and Ranger Jim Westfall fought it, aided by 'Mrs. Jim, who was as good on a fire line as any man,' Frank Cole and Bug Christman. It took them three days to corral the fire and a bear which Cole had killed was their only food during that time....

"Every forest official from Fred Winn, Supervisor of the Coronado, on down to the newest recruit, makes his toast to 'the lady rangers'. They claim a ranger's wife can either make her husband a success or 'break him.' They are heroines in many stories.

"Yes, life was tough for the rangers in those horse and buggy days. They had to know every creek, peak, spring, and canyon on every mountain range within their assigned territory; they had to be clever woodsmen to read forest signs for lions, bear, deer, antelope and coyote; they must read all the cattle brands, be familiar with every rancher, farmer, nester, squatter, prospector and mine operator; and above all they had to know the 'Rule Book' for the Forest Service so they could enforce every regulation. Under oath to serve the Nation and its people, the Forest Service Ranger of bygone days or the present can be no weakling."

FORESTRY ENGINEERS TO MEET

By Jno. D. Guthrie, Washington

It may interest former members of the 10th and 20th Engineers (Forestry) and the New England Sawmill Units to know that informal dinner reunions of these World War organizations are being planned for Boston during the coming American Legion National Convention, September 23-26. These are to be separate reunions, not joint affairs. The times and places of these Veteran get-togethers are not known as yet. However, any interested former member of these three organizations may obtain information by writing to Seward A. Ridlon, 44 South St., Concord, N.H., for the 10th Engineers; Thos. E. Holman, 220-11th Ave., New York City, for the 20th Engineers; and Edgar C. Hirst, 11 Tahanto St., Concord, N.H., for the N.E. Sawmill Units.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

AVERILL, C. C. Gold and timber. Jour. Forestry 38:589-590. July 1940.

BAIRD, P. K., and CURRAN, C. E. Statistical survey of rosin as used in the paper industry. Paper Trade Jour. 111:37-44. July 4, 1940. Abstract appears in Paper Indus. and Paper World 22(1):68. April 1940.

BENSON, A. O. A new approach to hardwood log grades. South. Lumberman 160(2022):27-28. July 1, 1940.

BETTS, H. S. (Book Review) Timber, its structure and properties, by H. E. Desch. 169p. London and New York, Macmillan, 1938. Jour. Forestry 38: 521. June 1940.

BICKFORD, C. A., and BRUCE, DAVID. Fire-discovery time in the longleaf-slash pine type. South. Pulp and Paper Jour. 3(1):16-18. June 1940.

BRANDEBERRY, J. K. Radio roundtable discussions on conservation. Jour. Forestry 38:446. May 1940.

BRANDSTROM, A. J. F., and FLANAGAN, G. C. Volume losses in logging and marketing old growth Douglas fir. Timberman 41(7)17-22. May 1940.

BRAY, M. W., SCHWARTZ, S. N., and MARTIN, J. S. Sulphate pulping of Douglas fir: Effect of growth variables on yield and pulp quality. (Part 3); abstract. Paper Indus. and Paper World 22(1):72. April 1940.

BRUCE, H. D. Optical thickness of the transition layer between transparent media. Proc. Roy. Soc. Lond. Ser. A. 171:411-421. June 1939.

BYRAM, G. M. The Appalachian fuel moisture scale. Jour. Forestry 38:493-495. June 1940.

______ ______ A Plains haze meter. Jour. Forestry 38:401-403. May 1940.

CARLSON, T. A. Bending tests of corrugated board and their significance. Abstract. Paper Indus. and Paper World 22(1):72-73. April 1940.

CASSADY, J. T. Management for prevention of sneezewood poisoning. Natl. Wool Grower 30(5): 12-14. May 1940.

CHIDESTER, G. H., and MCGOVERN, J. N. Effect of acid concentration and temperature schedule in pulping resinous woods. South. Pulp and Paper Jour. 3(1): 10-15. June 1940.

CURTISS, H. L. Highway alignment should blend with the landscape. Western Construction News 15(6):210-213. June 1940.

DAVIS, K. P. Economic aspects of managing western white pine forests. Northwest Sci. 14(2): 26-32. May 1940.

______ ______ In defense of controlled burning and similar public forestry undertakings. Jour. Forestry 38:592-593. July 1940.

DAYHARSH, V. J. Timber sales on the Nebraska national forest. Jour. Forestry 38:586-587. July 1940.

DEMMON, E. L. The contributions of forestry under changing conditions of Southern agriculture. Conservationist 6(12):12-13. Apr. 1940.

______ ______ The forest tax delinquency problem. Naval Stores Rev. 50(14): 14. July 6, 1940.

DUTTON, W. L. Administration of national forest grazing. Natl. Wool Grower 30(4):18-21. Apr. 1940.

ELLISON, LINCOLN. [Correspondence] to Editor...concerning article by E. G. Roberts on regulation of cutting. Jour. Forestry 38:531. June 1940.

FONS, W. L. Influence of forest cover on wind velocity. Jour. Forestry 38: 481-486. June 1940.

FOWELLS, H. A. Cutworm damage to seedlings in California pine stands. Jour. Forestry 38:590-591. July 1940.

FRIEDL, A. C. Our forest viewpoint. Conservationist 7(2):14, 17. June 1940.

GEVORKIANTZ, S. R. Comments on "The approach of loblolly and Virginia pine stands toward normal stocking." Jour. Forestry 38:512-513. June 1940.

GODWIN, D. P. The evolution of fire-fighting equipment. Pulp and Paper Mag. Canada (Woodlands Rev.) 41:349-351. Apr. 1940.

GRANGER, C. M. National forest recreation - wild and not so wild. (Condensed from Outdoor America, for Feb., 1940). Conservation 6(2):17-19. Mar./Apr. 1940.

HIERONYMUS, G. H. (Book Review) How to train supervisors, by R. O. Beckman. 305p. New York, Harper, 1940. Jour. Forestry 38:451-452. May 1940.

JACOT, A. P. The fauna of the soil. Quart. Rev. Biology 15:28-58. Mar. 1940.

JEMISON, G. M. The influence of locality, season, time of day, and year on the visibility of smoke columns. Jour. Forestry 38:435-437. May 1940.

JENSEN, H. A. (Book Review) Vegetation type maps of California and western Nevada, by Forest survey of California forest and range experiment station, U.S. Forest Service, 1932-. Jour. Forestry 38:522-523. June 1940.

JOHNSON, W. M. Infiltration capacity of forest soil as influenced by litter. Jour. Forestry 38:520. June 1940.

KACHIN, THEODORE. The Hebo pruning club. Jour. Forestry 38:496-497. July 1940.

KELLER, E. L., SIMMONS, E. L., and BAIRD, P. K. Some observations on the effect of alum on certain sheet properties. Abstract. Paper Indus. and Paper World 22(1):76-77. Apr. 1940.

KIRKLAND, B. P. Forest cooperatives and public assistance to private forestry in Sweden. Conservationist 6(12):14-15. Apr. 1940.

KRAUCH, HERMANN. Vigor, release, and tree form as guides to marking. Jour. Forestry 38:595. July 1940.

KUENZEL, J. G. (With C. M. GENAUX, Iowa Agr. Expt. Sta., senior author) Defects which reduce quality and yield of oak-hickory stands in southeastern Iowa. Iowa Agr. Expt. Sta. (Forestry Sect.) Research Bull. 269. 1939.

LIMSTROM, G. A. (Book Review) Defects which reduce quality and yield of oak-hickory stands in southeastern Iowa. 37p. by C. M. Genaux and J. G. Kuenzel. Iowa Agr. Expt. Sta. Forestry Sect. Research Bull. 269. Jour. Forestry 38:525. June 1940.

MCQUILKIN, W. E. The natural establishment of pine in abandoned fields in the Piedmont plateau region. Ecology 21:135-147. Apr. 1940.

MILES, CLARK. Reaction of students to adaptability or mental tests. Jour. Forestry 38:447. May 1940.

MUNGER, T. T. Thirty years growth of Douglas fir. Timberman 41(8):17-18. June 1940.

NEFF, PHILLIP. Truck logging in the Inland Empire. West Coast Lumberman 67(5):65. May 1940.

NELSON, M. L. Successful storage of southern pine seed for seven years. Jour. Forestry 38:443-444. May 1940.

NELSON, R. M. Vigorous young yellow poplar trees can recover from injury by Nectria cankers. Jour. Forestry 38:587-588. July 1940.

NELSON, R. W. In defense of an economic approach to public forestry. Jour. Forestry 38: 593-595. July 1940.

______ ______ Thinnings, soarings, and economics. 38:445-446. May 1940.

NEWLIN, J. A. Falling timber with less damage. Timberman 41(8):11-13. June 1940.

PEARSON, G. A. A second cutting of Ponderosa pine. Conservation 6(2):20-22. Mar./Apr. 1940.

PEIRCE, E. S. Sale of lumber salvaged from hurricane-damaged New England timber. South. Lumberman 160(2021):29. June 15, 1940.

RIETZ, R. C., and KIMBALL, K. E. Kiln schedule for extracting red pine seed from fresh stored cones. Jour. Forestry 38:430-434. May 1940.

RITTER, EDWARD. The distillation of birch oil. Jour. Forestry 38:517-518. June 1940.

ROTHERY, JULIAN. Analysis of financial returns from liquidation and the two-cut system. Jour. Forestry 38:538-544. July 1940.

ROWE, P. B. The North Fork infiltrometer, an instrument for measuring the infiltration capacities of soils. Jour. Forestry 38:588-589. July 1940.

RUDOLF, P. O. Further comments on "Why forest plantations fail." Jour. Forestry 38:442-443. May 1940.

SAUNDERSON, M. H. Comment on "Forest land use." Jour. Forestry 38:510-511. June 1940.

______ ______ Some economic aspects of western range-land conservation. Jour. Land and Public Util. Econ. 16:222-226. May 1940.

SCHREINER, E. J., and HUBERMAN, M. A. Induced flowering - a tool for mass selection, progeny tests, and forest management. Jour. Forestry 38:491-492. June 1940.

SHIRLEY, H. L. The task for a central forest seed laboratory. Forest Leaves 30(2):3, 11. Mar./Apr. 1940.

SIMMONS, F. C. Does total growth equal allowable annual cut? Jour. Forestry 38:409-412. May 1940.

SNOW, A. G., Jr., and DUFFIELD, J. W. Genetics in forestry. Jour. Forestry 38:404-408. May 1940.

SPACE, R. S. Some slants on forestry and soil conservation. Northwest Sci. 14(1):14-16. Feb. 1940.

SPARHAWK, W. N. (Book Review) Book of the broadleaf trees, by Frank H. Lamb. 367p. New York, W.W. Norton and co., 1939. Jour. Forestry 38:448. May 1940.

______ ______ (Book Review) Eire. Report of the Minister for lands on forestry for the period 1st April 1933, to 31st March 1938, by T. O. Deirg. 13p. Dublin, Govt. Pub. Office, 1939. Jour. Forestry 38:454. May 1940.

______ ______ (Book Review) Wooden tanks in industry, by M. J. Brophy. 20p. Ottawa, Dominion Forest Serv. Circ. 55. Jour. Forestry 38:525. June 1940.

SPENCER, C. C. Battling rams. Western Sportsman 5(2):6-10, 20. July 1940.

STICKEL, P. W. An automatic apparatus for detecting and reporting forest fires. Jour. Forestry 38:502-508. June 1940.

______ ______ The effect of basal wounding by fire on trees in the Northeast. Amer. Wildlife 29:145-146. May/June 1940.

______ ______ Why close the woods. Hunting and Fishing 17(5):13, 32-33. May 1940.

STOECKELER, J. H., and SUMP, A. W. Successful direct seeding of northern conifers on shallow-water-table areas. Jour. Forestry 38:572-577. July 1940.

STRAUSS, C. W. Using a practical approach in private forest management work. Conservationist 6(12):8-9, 17. Apr. 1940.

TEESDALE, L. V. Inside vapor seal eliminates condensation, government study shows. Natl. Mineral Wool Assoc. Performance 2(3):3-4. 1940.

THELEN, ROLF. Letter to Robert Lake Co., Jackson, Mich, re condensation in cabins. Building Supply News 58(6):50. June 1940.

THOMSON, W. G. A growth rate classification of southwestern Ponderosa pine. Jour. Forestry 38:547-553. July 1940.

TIEMANN, H. D. Lessons in wood technology, XXII, XXIV, XXV. South Lumberman 160(2017):45-46. Apr. 15; 160(2021):45-46. June 15; 160(2023):39-40. July 15, 1940.

TORGESON, O. W. Air distribution in the dry kiln. Timberman 41 (8) :32. June 1940.

______ ______ Uniformity of air distribution in a lumber dry kiln. South. Lumberman 160(2017): 47-48, 50. Apr. 15, 1940.

WARD, JAY. On production of gum naval stores. Naval Stores Rev. 50(3): 18, 21. Apr. 20, 1940.

WATTS, L. F. Federal land exchange and selective logging. West Coast Lumberman 67(5):62, 82. May 1940.

WINN, FRED. Coronado's journey and the forests and wildlife of 1540. Amer. Forests 46:296-299. July 1940.

THE EDITOR DISCOVERS

The following item appeared in a recent issue of the "New York Times":

"A decree, published today (August 21), establishes for the French Forestry Service a new regime.... The Forestry Service will be directed by two government forestry experts, two forest owners and two lumber company representatives. They will supervise timber cutting, distribution marketing, and prices.

"No person not holding a card denoting his good standing in the profession can exploit forests and derived products. The cards may be withdrawn by a prefect for violations of rulings.

"The cost of this organization will be met by a tax on sales of wood and charcoal."

In order to provide authoritative information regarding courses of study for its employees, the Department has designated certain officials in the various Bureaus as Educational Counselors. These counselors, who have voluntarily assumed this added responsibility, are available by appointment for consultation regarding any problem concerning the further education of the members of their respective agencies. Those who expect to undertake further education this fall and are not sure whether they have selected the proper courses, or how much they should undertake, will do well to consult them before a final decision is made. Peter Keplinger is the Forest Service counselor. During Mr. Keplinger's absence from the office, Mr. Buell will serve as acting counselor.

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The Community Forest Program made excellent progress during 1939. Reports and correspondence received by the Washington office of S&PF indicated widespread interest in the establishment of units and considerable constructive action in many localities. Of special value was the interest taken by organized groups such as Chambers of Commerce, Service Clubs, Women's organizations, etc. Although complete information has not been received from all States, S&PF has prepared a brief summary of the information available. This shows that 67 new Community Forests were established in 16 States. Of these, 31 represented a transfer of community-owned property to be used as a Community Forest, 3 were acquired through tax delinquency, 3 were gifts to the community by private citizens, while 30 of them were outright purchases by the community. Distribution of the new units was as follows:

State	Number of New Community Forests	Acres
Alabama	1	48
Arkansas	1	640
Florida	2	180
Georgia	2	676
Illinois	14	5,386
Indiana	1	400
Iowa	4	(not reported)
Massachusetts	2	259
Mississippi	1	640
North Carolina	1	300
North Dakota	1	140
New York	21	102½
Ohio	5	346
South Dakota	8	218
Virginia	2	580
Washington	1	960
16 States	67	10,875½

Wisconsin created no new Community Forests in 1939, but increased the acreage in fifteen existing county-owned forests by a total of 70,069 acres, making a total of 1,798,382 acres in the county-owned forests of that State. The majority of these lands were acquired through tax delinquency, but some were purchased to eliminate isolated settlers or to block up existing public holdings.

Massachusetts also increased the area on two previously established Community Forests by adding 151 acres. These additional lands were acquired through tax delinquency.

New York has an enviable record. The first Community Forest in that State was established in 1909. Since that year there has been a consistent increase with an average of 20 new forests each year. The State now has a total of 620 Community Forests on which more than 70,000,000 trees have been planted.

During 1939 more than twenty million trees were planted on Community Forests, sixteen and a half million being planted in Wisconsin alone.

South Dakota reported that 5,000 man-days of labor had been given on Community Forest work in 1939, Ohio reported 3,500 man-days, Illinois listed 2,500 days, and Georgia, Virginia, and Florida reported smaller amounts of 350, 125, and 36 man-days respectively.

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The editor of the Service Bulletin would like to receive some good stories for the Christmas issue on the subject "My Most Unusual (or Interesting) Christmas." In fact, the stories need not be confined to Christmas experiences, they may be about any unusual experience - in Forest Service work, of course. Contributions should reach Washington not later than November 1. As an added incentive to authors, the writers of "Uncle Sam's Forest Rangers" have agreed to use as episodes in this program the stories that can best be adapted to such use. We sincerely hope that this appeal will bring forth some good articles. We know many good stories exist, if we can just get you to write about them.

G. D. COOK LEAVING THE SERVICE

Gerald D. Cook, who for the past 4½ years has been Chief of the Division of Private Forestry and for the past 6 months Acting Assistant Chief in charge of the Branch of State and Private Forestry in the Washington Office, is leaving the Service on or about September 15 to become Secretary of the Specialty Paper and Board Affiliates, a major unit of the American Paper & Pulp Association. His headquarters will be in New York City.

It has been largely due to his initiative and leadership that the private forestry work of the Service has been advanced to its present level.

Jerry's advancement in the Forest Service to his present position of responsibility has been rapid, but well deserved. After serving as forester for the City of Cincinnati and engaging for a number of years in lumbering and the manufacturing of furniture, he entered the Forest Service in the spring of 1933 as Inspector on the Huron National Forest. Not long thereafter he was transferred to the Regional Office at Milwaukee to head up private-forestry activities. Early in 1936 he was transferred to Washington to take charge of an expanded private-forestry program. Through his personality and ability he has made many friends for the Service and earned the respect of all in the Service who know him.

His many Forest Service friends are sorry to see him go, but appreciate the new opportunities that will be open to him. His leaving will be a distinct loss to the Service, but we take encouragement in the hope that a new friend in industry will help advance desirable conservation objectives, especially those in the private forestry field.

The best of luck to you, Jerry!!

E. S. PEIRCE

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SERVICE BULLETIN

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Vol. XXIV, No. 20 Washington, D. C. September 30, 1940

FOREST PRODUCTS LABORATORY STUDIES HARDWOOD LOG GRADING

By A. O. Benson, Forest Products Laboratory

A new system of grading hardwood logs, based on the amount of defect-free surface area instead of on the knots and other visible defects, is being worked out by the Forest Products Laboratory in order to afford equitable dealings between buyers and sellers of logs. Log grades are needed fully as much as the well-known lumber, cotton, tobacco, and meat grades of today.

Because it is so obvious that defects are features that lower the quality of lumber it is not strange that the assumption has been made that the proper starting point in hardwood log grades would be in restriction in number and size of defects. Right here everyone tackling the job of writing grade specifications has fallen into the same trap. The all-important point that has been overlooked in the past -- and in large part accountable for the confusion and lack of satisfaction with existing log grades -- is that hardwood lumber is graded not on the basis of defective areas but on the size and amount of defect-free areas. Eighty-five percent of all hardwood lumber is cut up before it is put to final use as parts of furniture, caskets, interior trim, and the like. Practically all such parts are clear or at least clear on one face.

When the Laboratory began work on log grades attention was focused on the way hardwood lumber is used and graded. Reasoning followed that if hardwood lumber is used in the form of clear material and is graded on the basis of the amount of clear material obtainable, why shouldn't log grading employ the same principle. There appeared to be no reason why a log surface could not be mentally divided and inspected for clear material much the same as lumber is inspected.

After taking its cue from hardwood lumber grading the Laboratory proceeded to draft some trial specifications for log grades in which the provisions with respect to defect-free areas formed the keystone. Mill tests with these specifications showed a consistency in quality stratification of logs that had been conspicuously lacking with the application of log grades of the defect type. Moreover, three log buying agencies have used the tentative Laboratory specifications with modifications and their experience supports the Laboratory's trials.

Fortified with the promising results, a series of studies involving northern hardwoods was initiated. In territory ranging from Wisconsin to New Hampshire intensive data have been obtained on 7,000 logs of about twenty species. The work has consisted of diagramming log surfaces and following the logs individually through the mills to get price tallies of volume and grade. With such data recorded it is possible to test any grades that might be under consideration.

No obstacles have yet been encountered that seriously block the plan to formulate a set of grades that will be standard for all species and all localities of growth. Modifications will probably be necessary to meet the peculiarities of certain species. Hardwood lumber grades set up standard grades with modifications to cover hardwood lumber wherever it is bought and sold and similar requirements should be possible with log grades, but until studies have been pursued in regions other than the North there is no assurance of this.

To precede formulation of log grades by actual field studies is an innovation, but such sequence should eliminate many of the objectionable features that arise in grades written with only a background of experience.

GLAMOUR VS. SAFETY

By S. B. Show, R.5

It suddenly came to me with some force that CCC boys, whom we are inclined to take as a matter of course, regard Forest Officers as superior beings. Their feeling is not entirely "hero worship", although there is an element of that. There is the respect commanded by a superior position, plus an admiration for individuals filling positions that to them have glamour. In our work-a-day attitude most of us fail to perceive this, or else we accept it with tolerant amusement. This attitude is stronger in some camps and in some individuals than in others, but it is something real and something that should be recognized. Too, it can be of vital importance in assisting us to accomplish our aims.

At present I am thinking more from the standpoint of safety than from any other. The record reveals that there are fewer accidents in the CCC ranks than in those of the administrative force. This indicates two things: (1) that we have not paid the same attention to safety for ourselves that we have required of the CCC organization; (2) that we have unwittingly been guilty of setting bad examples for CCC boys. Four Forests have recognized this and have subsequently established an excellent safety record among the administrative force. This was achieved by adopting the CCC Safety Code. My understanding is that this was done without any sacrifice, either in time or in work. Surely, if this is possible on Four Forests where the idea has been given thorough trial, it must likewise be possible on other Forests. I may be mistaken, but I firmly believe that the adoption of the CCC Safety Code by the administrative force will not only result in reduction of painful and serious accidents to members of the regular organization but will also tend, through example, to help better CCC safety records.

It is recognized that the adoption of the CCC Safety Code for regular use cannot but cause some question. We all know that for many years we never thought of safety as such. We know, too, that in many phases of the job we take risks and feel that these are inherent in the work itself. To some extent, this is true. However, looking back on our experiences we can all recall taking risks that were not justified. Many times we have done so merely for the thrill or because we thought it would save time or energy. We are beginning to recognize, however, that some of these things that we do without thinking and some that we do with thinking are neither in the interests of the job, of our families, nor of ourselves. Certainly we are not meeting our obligation towards CCC enrollees nor cooperating with the Superintendents and foremen who are trying to inculcate thoughts of safety in the minds of these boys. They are impressionable and, because of their regard for Forest Officers, we can do much by setting a fine example. We are under obligation, also, to safeguard our ERA workers and emergency fire-fighters, and by example, we can do a great deal toward accomplishing this.

In view of all this, should we not ask every Forest Officer to familiarize himself with and to follow just as closely as he reasonably can the instructions in the CCC Safety Manual?

THE NEW SPOT ON DOMINOS

By Hugh Fleming, Jr., Washington

The Washington Office of Fire Control has a file that begins with a peculiar message. Clipped to a business letterhead of a West Coast firm is the printed wrapper from a package of well-known cigarettes, and across the sheet of stationery is scrawled in red letters, "No wonder we have forest fires."

That letter was received by Fire Control on August 18, 1939. At the top of the file, dated almost a year later to the day --- August 16, 1940 --- is a letter from the manufacturer of those same cigarettes, stating that from now on the new packages of Dominos would carry the following message:

> CARE!
>
> Every year in the United
> States over 40,000 forest fires
> result from carelessness with
> matches and cigarettes.
>
> Enjoy your cigarettes and
> your forests, but don't let
> the one destroy the other.
>
> Break your match in two before
> you throw it aside. Be sure
> your cigarette is dead out before
> you throw it away.

Between the two letters lies an interesting story of cooperation between a big business concern and a Government agency.

The original letter from California had called attention to a testimonial printed on the cigarette package to the effect that the smokes tasted grand on a hunting trip. The unknown sender had felt that spot on the package was a "natural" for a fire prevention message.

There have been previous attempts by Washington and the field offices and a number of able Forest Officers individually to arrange this very type of cooperation with tobacco companies -- with meager results. But the anonymous letter received last year started a chain of correspondence which happily resulted in this clear-cut agreement to carry our message.

David Godwin of this office first contacted Larus & Brother Company, Inc., makers of Domino cigarettes, and later collaborated with members of Information and Education in formulating "copy" for printing on the cigarette package. When the final message was selected, the tobacco people used it exactly as it was prepared by the Forest Service. To us Government people, accustomed to editing, re-editing, writing, and re-writing, this swift acceptance of our version was in itself a small triumph.

We can predict much good to come out of this move -- indirect, as well as the direct benefits of putting our fire prevention gospel literally into the hands of the public. Here are some thoughts of further benefits: Isn't it significant that one tobacco company has felt such cooperation to be good business? Perhaps cigarette advertising copy has become repetitious, negative, even unbelievable -- so that a message with a public service slant is a refreshing change.

Furthermore, if one company does it, shouldn't that encourage competition? --- perhaps cause cigarette manufacturers to vie with each other in turning out the most attractive and effective fire prevention messages? If so, then we have started a rock rolling which might well be the forerunner of a landslide in our direction. It is a new variation, a new channel opened, for our never-ending campaign for forest fire prevention.

This may not be the first example of such cooperation, but it certainly is by far the best one to date. The Domino people like it, too. Mr. Davidson, of the firm's sales department, wrote Mr. Godwin that, "We are as anxious to cooperate in this great move as you are and have considered it a privilege to bring this word to our smoking public."

REGION 4'S FAMOUS SKIER

By F. C. Koziol, R.4

It was early in the fall of 1935 that the Supervisor of the Wasatch National Forest received a visit from a smiling, blond, and blue-eyed Norwegian who said he was interested in Forest Service work and wanted a job. When asked what he could do, he said he could handle most any kind of work out on the forest (and his physique did not belie his confidence), but that particularly he wanted to become connected with the development of winter sports facilities which were then much under consideration by the Wasatch and recreational groups in Salt Lake City.

So it was that Alf Engen began his first work for the Forest Service in Region 4 in the largely unknown and untried field of winter sports planning. Alf that first winter built a few jumping hills on the Wasatch and other Forests, as he was yet much of the old school as to skiing. (He won his first major ski jumping competition in Norway when 11 years old.) With passing time and further experience, needs of a different nature soon developed within the ranks of winter sports followers. From jumping hills interest shifted to ski trails, practice slopes, slalom and downhill race courses -- in short, to recreational skiing facilities for Tom, Dick and Harry, their brothers, sisters, wives, and mothers. The Forest Service had to keep pace.

And so in a year or two as Alf Engen's work became better known his travels spread Region-wide, even as interest in winter sports boomed within the Intermountain country. It became so that during the snow months the Wasatch saw little of him. Standing orders for his time came from a dozen or more places where winter sports centers were developing on National

Forests. From Las Vegas, Nevada; Jackson Hole, Wyoming; to McCall and Sun Valley, Idaho, Alf traveled. On the job he studied, planned, and advised. Frequently his coming attracted crowds of fans, who always insisted on demonstrations and were never disappointed.

For parts of three winters W. A. Harriman, Chairman of the Board of the Union Pacific and prime mover of the Sun Valley development, borrowed Alf to build their jumping hills, to ski for the Sun Valley Ski Club, and for other special work. During these trips, on leave from Forest Service work, he learned much more about skiing and winter sports in general. From a strictly jumping performer, within the span of only about three winters he became a highly skilled and polished ski runner in every department of the sport. His remarkable physique, courage, stamina, and burning competitive spirit won for him championships all over the land, not only in jumping but in downhill, slalom, and combination events. With the coming of the 1939-40 winter season Alf Engen was rated as one of the outstanding skiers in America and in the world. He was one of the stars selected for the Olympic team, but the Russo-Finnish fracas ruined that.

In February 1940 Alf traveled to Berlin, New Hampshire, for the National Amateur jumping championship. There against a brilliant field in one of the keenest competitions witnessed in many years he won handily. About a month later he entered the National Four-Way championship held in the Pacific Northwest on the Mount Baker and Snoqualmie National Forests. In this grueling test combining four specialized fields of skiing, downhill and slalom racing, cross-country and jumping, he again led in points all opponents. Throughout the winter he won a number of lesser tournaments.

After the season Alf was one of the leading contenders for the American Ski Trophy, the annual award presented to the skier with the best record in competition and who has done the most to promote the sport. When the judges met under the chairmanship of Roger Langley, National Ski Association President, the award to Alf was unanimously approved. His five years of work for the Forest Service in planning and developing winter sports areas and promoting recreational skiing were mentioned and given due weight in the award.

On June 28 the formal presentation of the trophy was made at a special meeting in Salt Lake City sponsored by the Intermountain Amateur Ski Association and the Junior Chamber of Commerce. E. E. Monson, Utah Secretary of State, made the presentation in behalf of Governor Henry H. Blood.

The trophy, which is provided for the award each year by G. H. Bass & Co. of Wilton, Maine, is a full-sized ski boot of solid silver mounted on a section of ski and held in place by a conventional cable binding. The boot and the ski section are in turn fastened to a solid black base of substantial size to which is appended a silver plate inscribed thus:

"American Ski Trophy
Awarded to Alf Engen
For his contribution to the sport of skiing
Season 1939-1940
By G. H. Bass & Co."

Alf received the trophy "in stride" as is his custom, while honors continue to come his way. He said that the winning of the American Ski Trophy gave him a greater thrill and more satisfaction than any other one of scores of trophies and awards he has received during his life.

This summer between trips to other Intermountain Region winter sports centers "in the making", Alf has charge of a CCC crew on the Cache National Forest near Ogden, planning and directing winter playground developments in Snow Basin, the newest and probably one of the best of Region 4 projects. In this and other ways he continues to make, during every month of the year/ substantial contributions to skiing, the sport that is like religion to him.

LUMBERMAN PRAISES SELECTIVE CUTTING

When a successful lumberman states that the time for regulation of cutting practices on privately owned timberland has arrived, it's a news story of man-bites-dog caliber. M. J. Fox, president of the Von Platen Fox Lumber Company, which owns some 50,000 acres of selectively logged land and timber in Michigan and Wisconsin, said just that Friday, August 16, when he dropped into the Regional Office for a visit with old friends. Just to make sure, the Contact editor sent this story to Mr. Fox for verification, and it came back today with his okay.

The indisputable logic of accomplished fact has convinced the Von Platen Fox Lumber Company of the wisdom of selective cutting. They started such a policy 10 years ago, and approximately 16,000 acres are now selectively cut.

About 100,000 acres of what was once Von Platen Fox property has been sold to the Federal Government in the last decade and is now reforesting itself as part of the Ottawa National Forest. Mr. Fox, who helped clear 200 acres for a farm in Charlevoix County in his boyhood - longing for the time when he could see neighboring lights at night - says it is a great satisfaction to go through the forest now and note the swift growth of the young pines, spruce, and hardwoods.

Evidence of the company's happy relations with Government agencies of conservation are the camps and acres donated to the University of Michigan for its forestry school camp in Iron County, Michigan, the 40 acres of virgin timber donated to the State of Wisconsin for a State park in Florence County, and 89 acres donated to the Federal Government on Golden Lake, Michigan, across from the University of Michigan forestry camp.

In a recent talk on the occasion of Ontonagon's one hundredth anniversary, Mr. Fox reviewed the history of the lumber industry in the Upper Peninsula of Michigan and paid tribute to the Forest Service as follows:

"The Federal forests have contributed greatly to the development of our country by employing young men by the thousands, teaching them how to work, planting trees, patrolling for fires, establishing offices in the district, teaching us how to select and cut timber, make stumps low, cut logs straight, and do everything pertaining to the beautification and utilization of our territory." - From "Daily Contact", R-9, September 6.

SOUNDS FAMILIAR?

"We ruin the lands that are already cleared and either cut down more wood, if we have it, or emigrate into the western country...A half, a third, or even a fourth of what land we mangle, well wrought and properly dressed, would produce more than the whole under our system of management; yet such is the force of habit, that we cannot depart from it." - George Washington

CLIMATIC CYCLES IN EASTERN OREGON AS INDICATED BY TREE RINGS

By F. P. Keen, in Monthly Weather Review, May 1937

(Other records indicate that the findings here shown are generally applicable to all of our far western fire country. – Roy Headley.)

Through a study of tree rings in eastern Oregon it has been possible to arrive at an index of the ancient climatic history back to the year 1268. Micrometer measurements of annual radial growth of 1,240 ponderosa pines taken in 44 different localities of eastern Oregon have given a sound statistical basis for this study.

It was discovered that a broad climatic influence has uniformly dominated the growth pattern over a wide area of eastern Oregon and northern California. Any sample of ten selected trees was sufficient to show the same fluctuations of good and poor growth and outstandingly good and poor years, except for short periods where local influences such as fires, windfalls, or defoliations obscured the general pattern.

The boundaries of this climatic zone are not as yet well defined, but in its broader aspects it probably takes in all of the northern Great Basin region, from the Cascades to the Rocky Mountains, including the drainages of the Pitt, Klamath, Deschutes, Snake, and Columbia Rivers. Uniformity of tree-ring pattern has been found in this study from Alturas, California, north to the Metolius River, and from the summit of the Cascades eastward to the southern portion of the Blue Mountain Range. Meyer has shown that the same general tendencies exist throughout the Blue Mountains and northward throughout eastern Washington. Since tree-ring patterns reflect such general agreement over broad regions, they are undoubtedly good indicators of such weather conditions as affect plant growth.

A significant correlation was found between seasonal precipitation and tree growth. On comparing the cumulative effect of 2 years of precipitation with tree-ring growth, a highly significant correlation ratio was found. By taking into account the distribution of rainfall through the year and the cumulative moisture through several seasons, an even higher degree of correlation may undoubtedly be found. The width of each annual ring represents a summation and net effect of all the factors influencing tree growth. Thus the tree rings become a better measure of good or poor periods for plant growth than can possibly be obtained through any number of weather-recording instruments.

The tree-ring record for eastern Oregon indicates that during the past 650 years there has been no general trend toward drier or wetter years. If such a trend exists, the change over a 650-year period is so slight that it is obscured by other fluctuations. Average growth for the 20-year period 1900 to 1919 was found to be identical with the average growth during the past 650 years. There have been important fluctuations in growth throughout the entire period, however, with alternate periods of good and poor growth.

All tree-ring measurements agree in showing that a very critical subnormal growth period has existed since 1917. This slowing down of the growth rate is undoubtedly the result of deficient precipitation and lowered water tables. As compared with other drought periods, the present one is the most severe and critical that the present forests have experienced in the last 650 years. Several other periods have exceeded the present one in duration of subnormal growth, but none has approached it for severity. Growth in 1931, the poorest year, was 68 percent below normal.

The tree-ring record indicates that the last period of 19 years of drought and poor tree growth represents a major fluctuation in a broad climatic cycle which eventually will be followed by a wet period of better than average growth. No rhythmic cycle has been found which would permit a prediction as to when this reversal in trend will occur.

SAWMILL TO MOVE; WHOLE TOWN FOR SALE

Pine Valley, Okla., Sept. 17 (U.P.).-- Anybody want to buy a town?

The houses, public buildings and utilities systems of this community of 1,500 have been put up for sale by the Dierks Lumber Co. Included are a 60-room hotel, theater, post office building, store, office buildings and two schools.

Company officials said they planned to move their sawmill and other equipment to a new location. Pine Valley is in mountainous terrain in the southeastern part of Oklahoma, and "undoubtedly would make a good health resort," the officials said. - "Times-Herald," Washington, D. C.

DANVILLE COMMUNITY FOREST RECORDS

Story IV - The Parson's Wood Pile

By Ernest O. Buhler, Washington

After 20 years of petitioning, the pioneers at Danville, New Hampshire, succeeded in getting their own church. After three years of additional labor, they had assembled the 75 acre community forest and also found their future minister.

One can judge the seriousness of the final meeting about his engagement by reading the painstaking completeness of the minutes--

"Voted that we have chosen Mr. John Page of New Salem to Settle with us in the work of the Gospel ministry accordingly to give him a Call and invitation to settle with us in that work.

"Voted that in case Mr. Page Should accept our call and settle with us in the work of the Gospel ministry we give him that six acers of Land that was purchased of Mr. Jonathan French by our meeting-house in part for a Settlement as his own estate.

"Voted that in case Mr. Page should accept our call and settle with us in the work of the Gospel ministry we give him the money in building a Dweling house for the said Mr. Page.

"Voted that in case Mr. Page should accept our call and Settle with us in the work of the Gospel ministry we will give the said Mr. Page forty five pounds Starling of Grate Bratain Salery per Year.

"Voted that in case Mr. Page should accept our call and settle with us in the work of the ministry we give him the use and Improvement of all our Parsonige Land Situate in our Parish with our Rezarving the wood and timber standing on the whole with the said Mr. Page Having the Privlidge of Cuting Down wood and Timber for his own use with our maintaining the out side fences Round said Parsonidge Lands with the said Mr. Page having the Privlidge of Clearing up as much as he shall Think Proper -

"Voted that in case Mr. Page Should accept our Call and Settle with us in the work of the ministry we give him twenty five cords of wood cut and corded up at his Dweling house Per year -

"A True Entorey Attest Dyer Hook Parish Clark"

After three years of being Parish Clerk, Dyer Hook has changed some of his spelling. The word "A Test" he now spells "Attest".

Mr. Page was a Harvard graduate and just out of college. His unselfish devotion to duty, his early death and the carrying of his last remains on a cold winter night by the pale light of the moon, to their last resting place in the cold cemetery, is a part of the community's cherished history.

After the house had been built, it was deeded to Mr. Page, together with six acres of land. A resident minister in those days became a permanent part of the community. So much so, that in certain cases they deeded him the parish house and grounds.

Mr. Page labored in the Danville Community for 19 years. Each year 25 cords of wood was delivered to him, or a total of 475 cords. The select men would usually decide in what portion of the Community Forest the wood was to be cut. The cutting and geeing were then auctioned off to the lowest bidder. One auction was held for the cutting, and when the cutting was completed another auction would be held for the geeing of the cut wood, from the land to the parsonage.

The Reverend Mr. Page also cleared off some of the land for field and pasture, and during this 19 year period the community forest really performed its fullest service. It gave wood to heat the parson's house. It furnished grass to feed his cow, and it produced vegetables and other crops to support the minister and his family. The auctioning of the wood cutting and geeing (hauling the wood by oxen) also became a social event which after the parson's death developed into tree auctions and rental auctions.

SNAKE BITES

(From "What to Do in Case of Accident", Miscellaneous Publication 21 of the Federal Security Agency, U. S. Public Health Service)

Description. -- The bites of copperheads, water moccasins, coral snakes, and rattlesnakes are all poisonous. The diamondback rattlesnake is the most dangerous serpent of the United States. The bite from a small snake is not as poisonous as one inflicted by a large snake of the same species. The greater number of snake bites are received on the extremities.

Symptoms. -- Intense pain, discolored swelling of the bitten part, which soon becomes very marked, and profound disturbances of the system. The general symptoms develop soon after the bite. They consist of great weakness and prostration, nausea, and a profuse flow of saliva. Paralysis of the muscles occurs in from 3 to 4 hours. Unconsciousness is rare, but the patient falls into a kind of stupor.

Treatment: (1) Instantly apply tourniquet. -- The bite is usually on the lower part of a limb, and a band made of a handkerchief, necktie, or similar article should be instantly applied a few inches above the wound between it and the heart and tightly twisted with a stick to shut off the circulation to the part and prevent the poison from being carried into the system by the circulating blood.

(2) Incise and suck the wound. -- The bite of the most venomous serpents consists of but two punctures. These small wounds should be freely incised with a knife and then sucked. There is no danger in sucking the wound if there are no cracks or sores in the mouth or on the tongue. Additional small skin incisions, deep enough to cause bleeding, should be made around the area of the bite in order to cut off the lymph channels which otherwise would carry the poison into the general circulation.

(3) Cauterize the wound. -- After the wound has been sucked, it should be cauterized. This is done by applying carbolic acid or nitric acid on the end of a stick, such as a match stick or toothpick. Most of these injuries happen in the wilds, where such chemicals cannot be obtained. Cauterization may then be performed by heating a nail, a knife blade, or some other metallic object, such as a suspender buckle, in a fire and freely burning all parts of the wound. On hunting trips a cartridge may be torn open and a little gunpowder poured on the wound and then ignited with a match.

(4) After treatment. -- After the wound has been sucked and cauterized so as to extract and destroy as much of the poison as possible, the tourniquet may be loosened. It should be allowed to remain loose for 1 minute and then tightened up again. Wait 20 minutes, and if no alarming symptoms develop it is again released and this time allowed to remain loose for 2 minutes, after which it is tightened. Another period of 20 minutes is allowed to elapse, and on this occasion the tourniquet is left off for 3 minutes. This procedure, which is continued for several hours, gradually increasing the time the tourniquet is off, is known as using the intermittent tourniquet, the object being to allow only small quantities of the poison to get into the system at one time.

An injection of anti-snake-bite serium (antivenin) may be given to combat the venom. This serum is prepared from the blood of healthy young horses which have been highly immunized against the venom of the most poisonous North American snakes by repeated and increased doses of venom, for instance, the rattlesnake, moccasin, and copperhead. The serum is a commercial product for sale at drug stores, principally in snake-infested countries. The most effective serum is that which is specific for the venom of a particular type of snake. Full instructions are enclosed in the packet and the serum may be administered without the aid of a physician; but in the hands of a layman its success is problematical.

A person bitten by a snake should be kept quiet and recumbent during treatment and for several days afterward, even though he does not exhibit symptoms of poisoning. There is no merit in the administration of whisky or other alcoholic beverages to counteract the poison, as alcohol increases the circulation in the skin and consequently hastens the absorption of the poison, which is precisely what should be avoided.

THE EDITOR DISCOVERS

Within the Mt. Hood, Willamette, Umpqua, Rogue River, Siuslaw and Siskiyou National Forests, Oregon, are 456,629 acres of lands which for periods of from 33 to 48 years have been regarded as National Forest lands. They were, however, within the indemnity limits of the O & C grant, and their acreage was less than the unsatisfied portion of the grant. They had never been selected by the grantee, and the right of selection was cancelled by the Act of June 9, 1916. Up until recently the National Forest status of the lands was recognized by the Department of the Interior. During the past year, however, the Department of the Interior has taken the position that the lands were subject to the provisions of the Act of August 28, 1937, and should thereafter be so administered. Objections were raised to Forest Service sales or land exchanges involving use of stumpage on such lands. Sales of such stumpage were made by the O & C revested land administrator. By letter of June 8, the Secretary of the Interior transmitted to the Attorney General a brief by the Solicitor of that Department. By letter of August 16, the Secretary of Agriculture transmitted to the Attorney General an opinion by the Solicitor of the Department of Agriculture.

The Attorney General's opinion is dated September 6, 1940. After citing what he regarded as the major circumstances he said:

"For the foregoing reasons it is my opinion that disturbance of the continued administration of these lands by the Department of Agriculture as a part of the National Forest Reserves would not be warranted under existing law."

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The following statement has been received by the Bureau of Agricultural Economics from its State Representative in Montana regarding the County Planning Program. The National Forest mentioned is the Lewis and Clark.

"1. Livestock numbers have been reduced in the Forest areas to fit carrying capacity and provide watershed protection. The Forest Service Supervisor states that the understanding of local people of the problems in connection with the management and protection of the forest that has resulted from the planning work has made this possible with practically no difficulty.

"2. As a result of work with the planning committees during 1939 the Forest Service officials experimented with the transplanting of beavers with successful results. The officials state that they plan to transplant beavers before the first of November in line with planning recommendations.

"3. The use of all merchantable timber in Teton County is being confined to local farm and ranch operators for building and fence materials. This practice will be continued in accordance with the planning recommendations.

"4. Forest Service district officials state that due to the planning program in Teton County, their working relationships with other agencies has improved considerably and their work in the Forest has become easier due to the understanding of local people resulting from the planning process."

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The Washington Post for September 9 states:

"Nearly 3400 persons have been placed on the Civil Service Commission's registers during the past few days as candidates eligible for junior professional jobs. They were examined for the positions last spring.

"The registers and the number of eligible job candidates include: Jr. Agronomist, 191; Jr. Soil Scientist, 175; Jr. Animal breeder, 45; Jr. Social Anthropologist, 31; Jr. Legal Assistant, 760; Jr. Plant Breeder, 80; Jr. Biologist, 316; Jr. Entomologist, 153; Jr. Forester, 298; Jr. Range Examiner, 191; Jr. Statistician, 567.

"In addition the Jr. Administrative Technician eligible list -- for which there may not have been a 1940 examination -- includes 1283 minus the 181 appointed prior to September 1, 1940."

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The Southern Forest Experiment Station writes that considerable interest has been aroused recently in Texas regarding the question of cedar eradication from range lands. In order to clarify the many conflicting opinions on the matter, an inter-agency conference, in which the Station participated, was held at College Station, Texas, on July 15. To gain a better understanding and knowledge of actual conditions in the field a reconnaissance inspection trip over the Cedar Brake area was organized by the group for the balance of the week. Rather general agreement was reached near the end of the trip on the following points:

1. Eradication was evidently justified on gentle slopes and flats where appreciable amounts of productive soils were present.

2. Burning of cedar slash was harmful and should be discontinued and the slash allowed to remain in place as a protective cover.

3. Eradication on steep slopes, rock outcrops, and other critical sites should be limited if not wholly restricted.

4. The practice of eradication by large solid areas should be modified to provide protection of critical sites where permanent cover was essential to reduce run-off and erosion.

The field examinations were limited to areas where mountain cedar predominated since it was generally conceded that the eradication of redberry cedar (Juniperus pinchotti) due to its sprouting ability was at the present time economically impracticable.

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A tool which for 40 years previous to the advent of the shelterbelt on the midwestern scene had been designated as a "grape and berry hoe" is now being called by the company manufacturing it as a "grape and shelterbelt hoe." This tool is used to cultivate thorn.

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The following item appeared in the Tallahassee, Florida, "Daily Democrat" for August 26:

"Chester Franklin, producer-director for MGM, arrived here from Hollywood today in company with Jay Marchant, MGM business manager, and a crew of color cameramen to start preliminary filming of Majorie Kinnan Rawlings' Pultizer prize winning novel, 'The Yearling.'

"A series of comprehensive color tests and background shots will first be made of Florida clouds, sunrises, and sunsets and of vegetation. The moviemakers established bases at Ocala and Silver Springs and will start shooting immediately at the 'Yearling' set in the Ocala National Forest. The set was built early this year and allowed to age.

"Business Manager Marchant said Spencer Tracy and a company of approximately 100 will arrive in March to shoot the action sequences."

According to a CCC release, a total of $79,651.76 has been turned into the Federal Treasury from the sale of timber and other products from State lands cut or removed by the CCC since 1933. The Federal-State agreements provide that profits from forest products sold from State lands due to CCC work shall be divided equally between State and Federal governments until $3 per acre has been paid to the United States.

Connecticut leads with $49,954.76 in payments, Maryland second with $8,911.57, New York third with $5,541.53, and Ohio fourth with $4,557.07. The ten other States which have sent in smaller amounts are: Florida, Idaho, Kentucky, Louisiana, New Hampshire, Pennsylvania, Tennessee, Texas, Utah, and Wisconsin.

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Region 5 has been carrying on cooperative fire prevention work with the Shell Oil Company which has produced some very effective results as follows:

The company has had 7,500 copies of a forest fire prevention poster - showing a giant pine tree in forest setting - entitled "Keep Fire Away" printed and placed on double-faced "A" boards at all Shell service stations throughout ten western States. A reproduction of this poster in color was used on the cover of the August issue of SHELL PROGRESS, the company magazine. This issue of the magazine also contained a five-and-a-half-page spread and story "Smoke Gets in Their Eyes", prepared by the Shell publicity department and illustrated by photographs taken by them or furnished by Region 5. A total of 15,000 of these magazines was distributed to Shell dealers and cooperators.

A fire prevention window display on the ground floor of their building in San Francisco next to the Shell Touring Service office, which will remain in place during the present hazardous fire period.

Publication of Shell Resort-Cabin-Camping Directories giving fire prevention information and listing all Forest Service improved public camp grounds and facilities found therein, in ten Western States. The quantity of directories issued was as follows: California, Nevada, Arizona, New Mexico - 80,000; Montana, Idaho, Wyoming, Utah - 30,000; British Columbia, Washington, Oregon - 54,000; Total 164,000. Cost $8,000.

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Lytton C. Musselman, ex-CCC enrollee and later 2nd Lieutenant in a CCC camp, is in the Antarctic with Admiral Byrd for a year or two. He attributes his selection to his general all-round training while in the Corps.

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According to PM (N.Y.) of September 9, article by Robert Neville, Finland lost by the 104 days' Russian-Finnish War the following: 6,200,000 acres of forest, 5 big cellulose mills (20% of Finland's mills), 4 plywood mills (17%), and 10 sawmills (13%), 430 factories employing 20,000 workers (9% of total Finnish industrial labor force), one-third of her fisheries, and 425 miles of railroad. According to Russian sources, Finland also suffered 60,000 killed and 250,000 wounded. Also, only $16,000,000 of the $30,000,000 in credits granted by the U.S.A. last winter to Finland has been used because no way has been found to transport U.S. goods to Finland.

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Charles F. Frank, Administrative Assistant of the Routt National Forest, was awarded third prize in the National Federation of Federal Employees' September photo contest with a picture showing a group of skiers at Rabbit Ears Pass in the Routt National Forest.

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The following members of the Service retired during the month of September:
Nina M. Conlee, R-6
Robert W. Henry, R-9 (disability)
Katherine L. Reed, R-6
Richard R. Riggs, Washakie Forest, R-2 (disability)
Charles J. A. Schiefelbein, Laboratory

ANOTHER CCC BOY MAKES GOOD WITH FOREST SERVICE

By Don Jackson, R.5

Wallace Calvert, one of Surveys & Maps many and widely scattered "alumni," was a recent R.O. visitor. He is on his way to Region 10 in Alaska, from the Washington Office where he has been employed as a topographic draftsman.

Back in 1933, he was one of a number of CCC enrollees assigned to the Region 5 relief model plant in Castella. For outstanding workmanship, he was selected as sub-foreman, later as foreman, and when the plant was moved to San Francisco and operated as a WPA project, Wally took charge as foreman. His eagerness to learn map drafting earned him many drafting assignments which he worked in with his other duties. Successfully passing a Civil Service examination, he accepted a position in Washington, D. C., with the Bureau of Census, later transferring to the Forest Service.

His new assignment to Alaska is another step forward. There he will handle base map compilation and drafting.

We are proud of his success and he in turn gives no little credit to the Service for providing the training that has contributed toward his advancement.

The Service no doubt has many other such cases on record which in the aggregate may contribute in no small way to the high regard which is accorded it by the public and to the morale within its own ranks.

Certainly the time and effort invested in training these ambitious and capable youngsters is well worth while. We are always delighted to hear of "one of the boys" we may have helped along the road making good. Somehow or other, they all seem to have a warm spot in their hearts for the Forest Service. - From "California Ranger"

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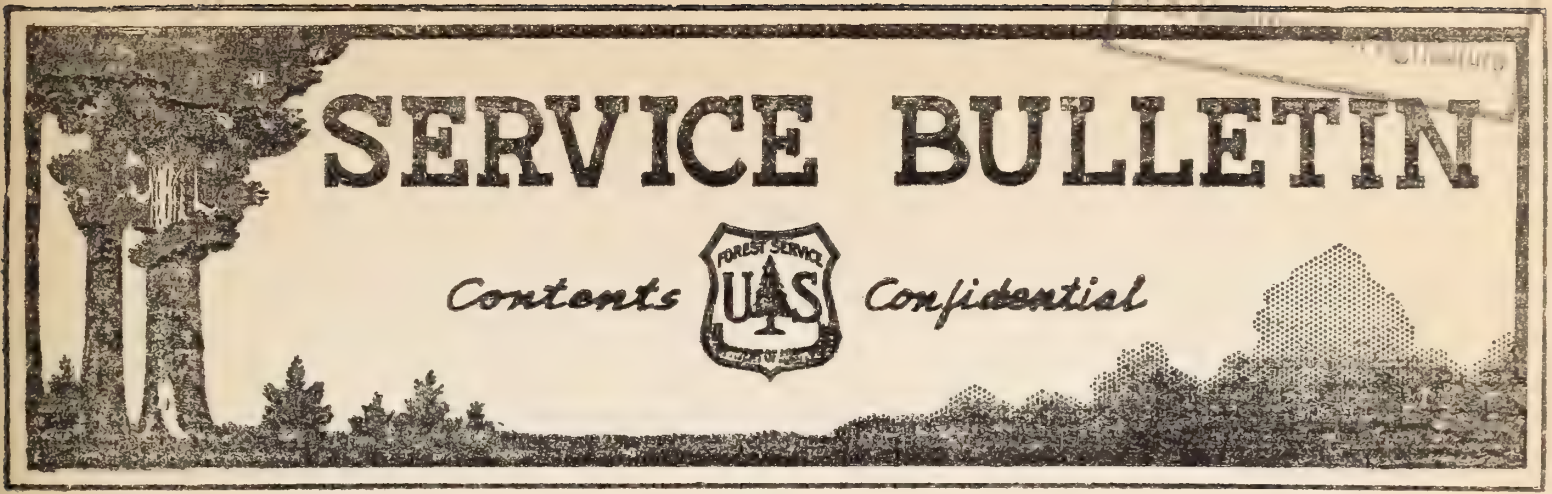

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 21 Washington, D. C. October 14, 1940

WHAT THE FOREST SERVICE CAN DO TO HELP LOW-INCOME FAMILIES

(The substance of the following report was presented by Acting Chief Clapp to the Rural Human Welfare Committee of the Department on September 19)

I. Relation of Forest Land to Rural Welfare:

By a process of trial and error over a period of 300 years the approximate area of our forest land has been fairly well determined. Today there is about 630,000,000 acres of forest land, roughly three-fourths of the original forest area. The transition from forests to farm crop production, in the main, was a sound and logical development. There are a number of regions however where this trend was ill-advised, or where a farm economy was built on the insecure foundation of forest exploitation. It is in these regions of exploited forests that we are faced with the problem of low farm income, and poor people. In fact many of our rural problem areas are in these regions.

For example, there is the Appalachian-Ozark region with one-half of the land in forest, and most of it badly depleted--thousands of rural families living on the hillsides and in the narrow valleys, eking out a bare existence on part-time and subsistence farms. There is the Northern Lakes States region where 80 percent of the land is forest, and a large part of the farmers and other rural families are on relief for lack of supplemental employment. There are the cotton and tobacco regions of the South--over 60 percent forest--yet in this region a great majority of the families are poorly housed.

On the whole--over one-half of the farms in the United States provide their operators with about one-third the income of the average corn-belt farm--the kind of farm generally looked upon as representing an American standard. Two-thirds of these low-income farms are located in about 900 predominantly forest counties, mainly in the South and Northern Lakes States.

During the period when the virgin timber in these regions was being exploited a fairly prosperous, but shaky forest and farm economy was established. There was plenty of employment. Farms were carved out of the cut-over lands to serve the lumber camps and sawmill towns, resulting in the false impression that a sound farm economy was being created. When the timber was gone, however, the large scale logging and milling disappeared--and with it came the decline of farming--unless there were other industries to take its place. Farming survived only in those areas where special crops could be grown, and where other markets could be obtained and held in competition with better farming areas elsewhere.

All this helped to create the present serious problem in these areas, with thousands of low-income rural people, a scarcity of supplemental employment, stranded farmers and woodsworkers, decadent villages and small cities left with little means of support, a huge relief problem--all requiring contributions from the more prosperous areas, and the Federal Government. The Forest Service believes that the restoration and wise management of the forest lands of these regions will be important measures contributing to an improved level of living.

II. What the Forest Service is Doing Now:

IN NATIONAL FOREST ADMINISTRATION:

As of June 30, 1939 there were 160 National Forests in 36 States, Alaska, and Puerto Rico--total 175,000,000 acres. While most of them are located in the West, National Forests have been established in some of our most critical problem areas, in the Appalachians, Ozarks, the deep South, and the Northern Lakes States. It is estimated that one million people are directly dependent upon the National Forests for all or a portion of their livelihood, and that an additional two or three million people live within the immediate range of the National Forests. A large segment of this population is rural families with low incomes. The Forest Service has long recognized that its management policies should be directed towards aiding the greatest number of local people consistent with the maintenance of the basic forest resources. These management policies and their actual application as tested over a period of 35 years, and as they relate to low-income families include:

1. Timber Sales: The Forest Service makes available for sale National Forest timber products, on the basis of (a) free use of dead and down timber in designated areas where such use is for domestic purposes only and not for resale, (b) sales at the cost of administration where such use is to be confined to domestic purposes such as fence material, corral poles, logs for barns or houses, etc., (c) sales of less than $500 without competitive bids, (d) sales on a competitive basis when over $500. As an indication of the extent of this use, and application to families of low-income, 20,000 out of the 22,000 timber sales made by the Forest Service in 1937 were for amounts less than $500. In addition there were 5,393 sales at cost, and 112,209 free timber use permits issued.

2. Livestock Grazing: Stock grazing as permitted on the National Forests recognizes the needs of low-income families. The Forest Service grants free use to local families for domestic stock not in excess of 10 head. Over 27,000 local settlers benefited by this provision in 1939. In the paid permit class 83 percent of all cattle and horse permits issued were for less than 100 head, and 62 percent of all sheep permits issued were for less than 1,000 head. A total of 24,295 paid grazing permits were issued in 1939.

3. Recreation: The Forest Service maintains 3,600 public campgrounds, and has long followed the policy of adapting its recreational development to meet the needs of local people. In addition to the wide variety of free and informal use of the National Forests for recreational purposes the Forest Service maintains 25 organization camps for the use of public agencies, particularly welfare groups, such as the 4-H, Y.M.C.A., Boy Scouts, and others. These camps built by the Forest Service are made available to these agencies for organized outdoor recreation and camping. Such camps are being established in the Southern States for negroes.

4. Employment: Besides the tremendous amount of employment provided by the sale and use of National Forest products, the National Forests are considered to be the source of a large amount of useful public works. Besides the regular Forest Service employees there are over 4,000 seasonal workers employed--mostly from farms and villages in and near the National Forests. Between the months of March 1938 and February 1939 about 85 thousand man-years employment was provided on the National Forests, most of which was in the form of CCC and WPA work.

5. Tenant Rehabilitation: The Forest Service recognizes the policy of aiding families affected by its acquisition program. In doing this it also recognizes that in most of the forest regions, particularly in the South and East, there is little chance for these displaced families to find opportunities elsewhere of their own accord. Furthermore, the Forest Service believes that it should work towards the establishment of a healthy and prosperous community life in the National Forests including a resident population that will be available to do the necessary forest work. There are thousands of families now resident on, or using, small portions of National Forest land for farming purposes. Recognizing its landlord responsibility the Forest Service has started a modest program of making all of its tenant houses habitable, establishing pure water supplies, adequate improvements for livestock, provisions for gardens and limited cultivation, all at a cost averaging less than $500 per family. All of this work of course is of direct benefit to low-income families.

6. National Forest Acquisition: Last fiscal year with an appropriation of three million dollars the Forest Service acquired 697,096 acres of land for National Forest purposes, mainly in eastern United States. Much of this land if not acquired would have continued to deteriorate and probably go tax delinquent. The significance of the National Forest acquisition program as it relates to low income families is that it puts a stop to further exploitation of the basic forest resources and enables the Government to reclaim the land so that it will again provide adquate support for people--on a continuing basis.

IN COOPERATION WITH THE STATES AND PRIVATE OWNERS

Forest Service program of cooperation with the States and private owners in fire protection and distribution of planting stock, etc., under the Clarke-McNary Act is related to families of low-income in two ways--first, through the aids extended for fire protection, and reforestation, the restoration and maintenance of the forest resource on which thousands of families depend for a livelihood is insured. The second, is that in dealing with the States and private operators the Forest Service is constantly bringing to their attention the benefits to be derived from adopting management policies similar to those found practicable on the National Forests and the findings determined by forest research. As a result many State-owned forests are managed after the National Forest pattern and a few private operators have adopted policies not only satisfactory from a silvicultural standpoint, but from the standpoint of providing employment to local people.

RESEARCH: The principal contribution of research to the program of aiding low-income families is made by searching out new and improved uses and methods of manufacturing and merchandizing forest products, thus enhancing the value of products that otherwise would be wasted or left in the woods. Utilization of aspen and jack pine, once considered weed trees, and the manufacture of newsprint from southern pine, all have resulted from forest research. Certainly the employment created by these new processes must be attributed to this research. In addition, the Forest Products Laboratory's investigations in building construction and more recently the development of prefabricated plywood construction for low-cost housing has been a distinct contribution. The Forest Service has also been helpful in developing low-cost automatic wood-burning stoves.

OTHER PROGRAMS: The New England Forestry Emergency Project (administered by the Forest Service) was established in order to help thousands of farmers in the Northeast affected by the 1938 hurricane to salvage their damaged timber. The Forest Service also administers the Naval Stores Conservation Program for the AAA which is of direct benefit to a large number of turpentine farmers. The Prairie States Forestry Project has helped to make possible better living and security to some 23 thousand farm families.

III. WHAT THE FOREST SERVICE COULD DO

While the contributions that the Forest Service is now making in the interests of low-income families appear to be small, much more could be done if broader authority and increased appropriations were available. The basic job of the Forest Service and what it can do to advance human welfare in rural areas is directed towards a common goal, that of restoring and maintaining the forest resource, and as a corollary bolstering the related farm economy and dependent community structure. The processes of forest restoration and management will of themselves help stabilize and better the agricultural situation and afford the people in related towns and villages with means to maintain their economic life. The Department and the Forest Service have already recognized and are attempting to promote more adequate ways in which this can be done. The only requirement is the means by which to do it. The means require additional authority and appropriations. This program is in general terms the program recommended to the Joint Congressional Committee on Forestry. It is expressly designed to meet the critical human problem in forest regions already exploited or threatened with exploitation. The program includes:

1. PUBLIC AND PRIVATE COOPERATION: The most important part of the Forest Service job is in connection with the private forest land problem. In order to underwrite the insurance of a prosperous rural economy, proper management must be established on that three-fourths of the Nation's forest land that is in private ownership. In spite of the progress that has already been made, forest management has not yet been established on most of it. Both the Department and the Forest Service have recognized two principal ways of meeting this problem: (a) Through cooperation—a broadened and enlarged scale of public cooperation with private owners, and private cooperation insured by public regulation; (b) by extension of public ownership—community, State, and Federal management of forest lands. The degree of success obtained in establishing this program, it is believed, will determine whether or not a healthy and prosperous economy in our forest regions can be established and maintained.

2. NATIONAL FOREST ADMINISTRATION: In order to create more opportunities and benefits for low-income families the Forest Service needs additional man-power and material to adequately protect and manage the National Forests. For example, it is a well-known fact that in the National Forests of the South and the Appalachian-Ozark region, additional ranger personnel would make it possible to make more small sales of National Forest timber products. In addition an increased budget would permit the establishment of more organization camps for low-income families for which plans have already been drawn up and approved. The Forest Service has a six-year program of public works on the National Forests which would provide 16,600

As one looks over the great game areas and shooting grounds of the United States and Alaska it may be possible to find better environment, more game, and, in rare cases, possibly greater variety, but no place equals this in the progress which man has made in solving the problems of wildlife management and the more difficult problem of cooperative management of resources which have fallen to both State and Federal agencies to administer.

As a member of the Forest Service staff and speaking for Mr. Clapp, Acting Chief of the Forest Service, I want to express appreciation for the splendid idea and the way it has been carried out. I want also to pledge our interest and support in bringing this area to a realization of the ideal which was in the mind of Justus Cline, of Congressman Robertson, of the Virginia Commission of Game and Inland Fisheries and of the sportsmen and people of Virginia. Here we feel is a resource of land and forests charged to us to administer which is contributing to the welfare of the State and Nation not only economically and socially but is pointing to a closer and more effective union of State and Federal agencies.

(The Big Levels Wildlife Management Area is located in the George Washington National Forest, Virginia. Participating in the dedication ceremonies, which were held at Sherando Lake, near Waynesboro, were: Judge William S. Snow of the Virginia Game and Inland Fisheries Commission; Paul Blandford, President of the Virginia Wildlife Federation; Francis Loth, Secretary of the Waynesboro Game and Fish Protective Association; Carl D. Shoemaker, Secretary U. S. Senate Committee on Wildlife Resources; Ira N. Gabrielson, Chief U. S. Fish and Wildlife Service; and H. L. Shantz of the U. S. Forest Service. Representative A. Willis Robertson, Chairman House Select Conservation Committee, gave the dedicatory address. A plaque, containing the following inscription, was unveiled: "Through the foresight and energy of Justus H. Cline with the cooperation of the Commission of Game & Inland Fisheries, Waynesboro Game & Fish Protective Association, Virginia Wildlife Federation, and the United States Forest Service the Big Levels Wildlife Management Area was made possible and is dedicated to the Conservationists of Virginia and the Nation. September 29, 1940." - Ed.)

SIMPLE REMEDY FOR VAPOR LOCK

Following up the R-5 story about the tanker which stalled with vapor lock August 11, and got caught by a forest fire, Bud Elkins, of Wildlife, submits the following remedy for vapor lock in cars having a vacuum operated windshield wiper - simply turn on the wiper. It won't start, but turning it on will relieve the pressure in the carburetor so that the injection valves can open to let gasoline pass into the cylinders. It has worked twice for Bud, and the fellow who told him about it says it never fails.

Another method, says Engineering, is to turn the car upside down and shake it. (R-9 "Daily Contact")

TRAINING

By Peter Keplinger, Washington

Just recently I was told by a Ranger that during the last few years there has developed among the Rangers a feeling of antagonism for anything called training, that they had had so much "formalized" stuff under that name that they resented everything connected with it.

At about the same time I chanced to see a memorandum signed by a Regional Forester in another Region which included this sentence, "The term 'training' has been used so much, so long and so loosely that to many its sound or the sight of it in writing causes the hairs on men's necks to stiffen."

This is a serious indictment. It is particularly surprising to me since I have had so little to do with training for the last six years that I seem to be out of touch. It seems surprising too that just as other Bureaus are becoming interested, we should have become so completely soured on it. What has gone wrong?

This question is really a serious one. Something should be done about it. But before anything can be done more will have to be learned about the cause.

Unfortunately there is being distributed to you a new training program--the first from this office in ten years. It will, according to the above sentiment, meet with an almost annihilating reception, yet we in our innocence thought we were doing something for you--something to help.

Then is it not time for some of us to do some straight talking? When the hair on your neck stiffens, say something. Don't let this antagonism you feel smolder inside. That's dangerous, both for you and for the Service. So let's get it out into the open. If it's my fault, let me have it. It won't do at all to go on this way. What's wrong? Get it out of your system.

UNIVERSITY OF MICHIGAN BOTANIST AIDS BOLIVIAN RUBBER STUDY

American rubber for American defense will be the object of an expedition of the U. S. Department of Agriculture which in the next five months will take University of Michigan Botanist Carl D. LaRue over the Andes and into the wilderness rubber country of northern Bolivia and the upper Amazon.

Vital raw material in both war and peace, rubber has been placed high on the American defense "must" list, and Dr. LaRue's trip into the mosquito-infested Bolivian tropics is seen as a first step toward ending Western Hemisphere dependence on the Orient for its rubber supply.

Widely recognized as an authority on rubber, Dr. LaRue has been chosen for the task because of his long interest in, and extensive knowledge of, black rubber which, while it is superior in yield and quantity to the white rubber now cultivated in the Orient, has never been tried out in plantations. He plans to survey the possibility of rubber cultivation in Bolivia; inspect lands suitable for rubber culture; determine the site for an experimental station in cooperation with the Bolivian government; and collect and send out seeds, bud wood, and stumps for planting in experiment stations throughout Central and South America.

Dr. LaRue sailed from New York September 27 with another representative of the Department of Agriculture. The two Americans will be met by Bolivian members of the expedition when they arrive in South America.

The Michigan professor has for many years been interested in rubber production and, since 1918, has been preaching the introduction of black rubber into cultivation. From 1917-1920, Dr. LaRue was research botanist of the U. S. Rubber Company in the Far East. There he developed the first methods of budding from high-yielding trees on a plantation scale. His methods increased rubber yield by twenty times. This, he points out, explains his great interest in black rubber. Because black rubber is a better producer in its natural state, he explains, it is quite possible that, if it can be cultivated in plantations, its yield may be even greater than the already large yield now taken from white rubber trees.

In 1923 and 1924, Dr. LaRue directed the Department of Agriculture's expedition to six South American countries. On this trip he travelled some 10,000 miles in the Amazon waterways studying rubber trees in their natural state. In 1927, he was rubber specialist and co-director of the Amazon-Tapajos Expedition of the Ford Motor Company which selected the land for Ford's rubber plantation at what is now Fordlandia. - (Univ. of Michigan Press Release)

SPECIAL CCC PUBLICATIONS

By Jno. D. Guthrie, Washington

I doubt if it is generally known among Forest Service folks that the Civilian Conservation Corps has issued some 35 publications as guides or handbooks for the CCC supervisory personnel, or about the work of the enrollees, what they have accomplished, how they live and how they are cared for.

Since 1933, the CCC has issued, or paid for, printed publications of three general types -- Forestry Series, Popular Series, and a Training or Educational Series.

So that the readers of the Bulletin may know what these publications are, and for record and reference purposes, detailed lists are here given.

Forestry Series or semi-technical guides or handbooks for use of CCC foremen, technicians, and enrollees. Small editions, not intended for general forestry distribution. Seven in this series have appeared with one now in the GPO, as follows:

No. 1 - "Measures for Stand Improvement in Southern Appalachian Forests" - 1935 - Out of print.
No. 2 - "Eastern Forest Tree Diseases in Relation to Stand Improvement" - Hepting - 1934 - To be reprinted.
No. 3 - "Stand-Improvement Measures for Southern Forests" - 1933 - Out of print.
No. 4 - "Contour-Trenches Control Floods and Erosion on Range Lands" - Bailey & Croft - 1937 - Out of print.
No. 5 - "Collecting and Handling Seeds of Wild Plants" - Mirov and Kraebel - 1939.
No. 6 - "Timber Stand Improvement in the Southwest" - Pearson - 1940.
No. 7 - "Reforestation in the Southwest by CCC Camps" - Pearson - 1940.
No. 8 - "Range Revegetation in the Southwest" - Cassady & Glendening - Now in GPO.

Popular Series. These are for general or popular distribution, to give the public a clearer idea of the kinds of conservation work the CCC is doing, how they work, and how they live in camp.

1. "Woodsmanship for the CCC" - (several times reprinted - 440,000 printed) - Intended primarily for CCC "rookies."
2. "The CCC - A Youth Program" - USFA & SCS - Leaflet - Revised and reprinted several times.
3. "Recreational Developments by the CCC" - USFA - Out of print.
4. "The Work of the CCC in Water Conservation" - 1936 - USFA - Out of print.

5. "The CCC and Its Contribution to a Nation-wide State Park Recreational Program" - 1937 - NPS - Out of print.
6. "Forest Improvements by the CCC" - 1938 - Reprinted.
7. "Forests Protected by the CCC" - 1938 - Reprinted.
8. "Reforestation by the CCC" - 1938 - Reprinted.
9. "The CCC and Wildlife" - Prepared by Biological Survey - 1938 - Reprinted.
10. "Hands to Save the Soil" - 1938 - SCS.
11. "The CCC At Work" - A picture story of the CCC - 73 photos - 96 pages - In GPO.
12. "The CCC and Public Recreation" - NPS & USFA - (Takes place of Nos. 3 and 5 above) In GPO.
13. "Life and Training in the CCC" - Director's Office - In preparation.

Training and Educational Series

1. Vocational Series - 1935 - A Manual, and Bulletins Nos. 1-15 - dealing with Agriculture, Automobile Repairing, Automotive Electricity, Carpentry, Concrete Construction, Cooking, Conservation of Natural Resources, Forestry, House Wiring, Masonry and Bricklaying, Mechanical Drawing, Photography, Radio Servicing, Soil Conservation, Plane Surveying. Prepared by CCC Division, Office of Education.
2. "CCC Forestry" - 1937 - Kylie, Hieronymus and Hall - Book - 334 pages - Illustrated.
3. "CCC Foremanship" - 1939 - 90 pages - Illustrated.

ARKANSAS AMBASSADOR REPORTS ON A TREE PLANTING

To the Editor of the Arkansas Gazette:
(Little Rock, Arkansas)

Tother day me and the women and childern got out the old flivver, borrowed a casin' and a license plate from a neighbor, and went out two miles from Danville to a tree plantin'. The land where the plantin' wuz at wuz so pore hit wuz turned out. When I wuz a little thing this here same land wus standin' es full o' pine trees es wheat in a wheat field. I seen fellers clearin' hit uplong years ago fur farmin' purposes, makin' big heaps o' the logs and settin' them on fire. You could smell pine smoke fur miles. What we wuz doin' wuz we wuz settin' the land back out in pine. A feller by the name o'—well I furgit his name—from Little Rock, come up bringin' a satchel full o' little sprouts, and we all went out to meet him and set out a tree a piece.

I felt kind o' funny 'bout the program. There we wuz undoin' what our parents had did years before. One generation had cut down the trees and burnt them, and we wuz puttin' them back agin. From the looks o' them sprouts, we'll have trees thar in less than a hundred years. But we'll never make progress, what with one generation tearing down and the next building the same thing back.

And we're goin' to need them trees one o'these days. They's a war a brewin' now in Europe, and hit might cross over here, and es things is at the present, they ain't enough trees. They's jist 'bout enough now fur the officers to git behind when the battle starts, and iffen we git any protection a tall, we got to set the trees out ourselves. My tree, judgin' from the sprout, is goin' to be mighty little, but they tell me you can git behind a very little thing durin' battles.

The feller from Little Rock wuz tellin' us, 1,000 o' us, o' different kinds o' pines. Besides me, they wuzen't more than a dozen that could make out what the poor feller wuz drivin' at. Hit takes brains to understand college guys. "One kind o' pine," he said, "is Pinus Strobus, and hit grows in Manitobie. Then thar's the Pinus Resinosa, with hits habitate in Norway. Then comes Pinus Palustris, follered by Pinus Ponderosa, and the loblolly, er Pinus Taeda. The last one I care to mention is Pinus Sylvestris." Then he mentioned the "flapper pine," so-called, he said, "because hit has bare limbs."

So, in 'bout 87 years, iffen you pass this way, and see a thicket o' small pines, why that's whar we had our shin-dig, and tree plantin' and, o' course, speakin'.

Ambassador From Yell
(Yell County, Arkansas)

(It is reported that "the feller from Little Rock" was Extension Forester Shulley)

THE EDITOR DISCOVERS

Forty-five farmers in Snohomish County, Washington, have organized what is reputed to be the first farmers co-op for marketing forest products in the West. The organization, to be known as the Washington Forest Products Cooperative Association, is a non-profit, non-capital stock corporation, having as its aim to bring about an orderly marketing of their forest products and to maintain the maximum productive capacity of the land through following sustained yield practices. Although at present there are only 45 members, all located in Snohomish County, the charter permits the formation of similar co-ops elsewhere in the State, and efforts are being made to increase the membership. Any farmer who has 5 acres or more of woodland is eligible for membership, but he must agree to practice sustained yield cutting on at least that timber he owns when he enters the co-op. The membership fee is $2.50. The present membership controls around 5,000 acres of woodlands. For the present their output will consist of piling, posts, pulpwood, shingle bolts, hewed ties, cascara bark, and some hardwood logs. Lester K. Sims of Sultan, Washington, is acting as manager of the association. A. Z. Smith, Snohomish County Agricultural Extension Agent, and foresters of the Soil Conservation Service office at Snohomish are assisting and encouraging the organization. The Forest Service will also cooperate to the degree its assistance is possible and necessary.

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In acknowledgment of flowers sent to him by the Forest Service (purchased from the "Two-Bit Fund") when he took his new office as Secretary, Claude R. Wickard writes Acting Chief Clapp as follows:

"I want to tell you and your people how very pleased I was to receive the very beautiful flowers and the note of congratulations and best wishes. It was nice to have them at that particular time because, as you may remember, the next day was the occasion of the Department staff meeting in my office and the flowers fit the spirit of the occasion.

"As you may have heard, I am interested in photography and I took some color pictures of these flowers. I am hoping the pictures will do justice to the subject."

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"Trees of Santa Barbara" is the title of a recent bulletin issued by the Santa Barbara Botanic Garden and the City of Santa Barbara, California. The author is Maunsell Van Rensselaer, Director of the Botanic Garden. The bulletin is an illustrated index of the trees growing in the region within approximately 50 miles of Santa Barbara. Approximately 550 species and varieties are listed, together with locations and measurements of characteristic and exceptional individuals. More than 800 specimen trees are cited. A copy of the bulletin is on file in the Washington Office Library. It sells for 75 cents a copy paper bound, and $1.50 cloth bound.

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The "Engineering News-Record" for August 29 (pages 59-61) contained an illustrated article by C. A. Betts of the Washington Office Division of Engineering entitled "Recreational Use of Forest Waters." In the September 12 issue of the magaine it is gratifying to note the following comment by the Editor of the magazine:

"Small Structures

"Although such monumental works as Boulder Dam and the Panama Canal emphasize the debt that the profession owes engineers in the Federal Service, they do not begin to suggest how widespread is the influence of the engineering work of these public servants. Particularly is this true of the men in bureaus that build relatively small structures. The U. S. Forest Service and the National Park Service are two of these bureaus. In the matter of recognition the Park Service fares somewhat better than the Forest Service by virtue of frequent spectacular bridge or tunnel jobs in the high mountain parks. But the Forest Service's achievements are quite as significant. During the past decade it has been particularly active in small dam building, a field where sound engineering principles are too often conspicuous by their absence. In adhering to as high standards for small dams as for large ones the Forest Service is following a practice that deserves wide emulation. And the profession could justifiably pay tribute to it as an important force in raising standards for small structures."

DOORSTEP BABE BLESSES RANGER'S HOME

How the well-known stork, announced in advance by a strange telephone call, came to the home of Leo Hutson, Targhee Ranger, is told in the following clipping from the Salt Lake Tribune of September 12:

"Thinking of bombs and not of babies, Leo Hutson, Targhee Forest Ranger at Victor, Idaho, was astonished when, upon carrying out mysterious telephone orders, he opened his front door and found a tiny baby girl in a cardboard box. Upset by the arrival of the little stranger, the Hutsons summoned their physician, who said the infant could not be more than two hours old.

"Efforts are being made to find how the baby came to be placed there. In the meantime, clothes have been donated by neighbors and the Hutsons are attempting to give the little miss a start in life." (R-4 "Daily News," Sept. 17)

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The Daily News has learned indirectly that Mr. and Mrs. Leo Hutson of the Victor District of the Targhee National Forest, who were the recipients of a new-born doorstep baby girl not long ago, have decided that they would keep the infant and raise it as one of their own. To help them along, neighbors of the Hutsons gathered one night and gave the couple a surprise shower of baby clothes. (R-4 "Daily News," Sept. 23)

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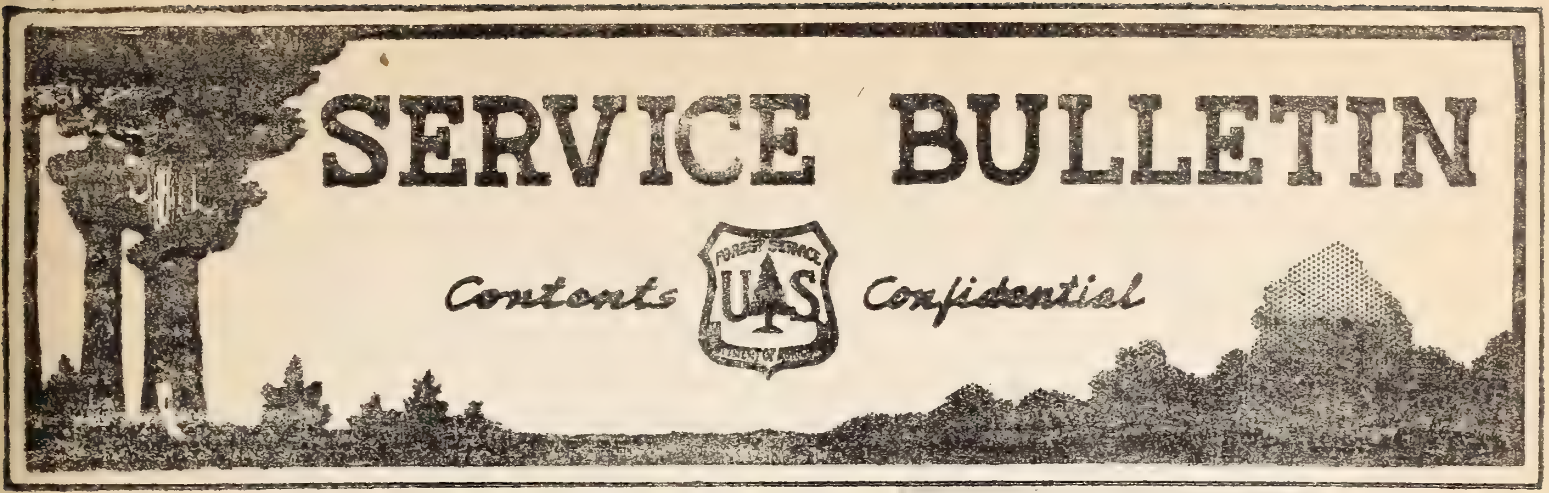

SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 22 Washington, D. C. October 28, 1940

THE MACHINING OF HARDWOODS

By E. M. Davis, Forest Products Laboratory

No appraisal of the general utility of any wood is complete without taking machining properties into account. Machining properties include all common woodworking operations. For certain high grade products, like furniture, millwork, and interior trim, these may be the most important properties of all because unless a wood can be machined to a good finish with average ease it is not economically available for such uses regardless of its other virtues.

Search through large reference libraries reveals that very little has been written on machining. Yet the number of inquiries received at the Forest Products Laboratory shows a very live interest in this field. One type of inquiry that is often received deals with the comparative workability of different woods. A manufacturer finds that his favorite wood is becoming a bit more costly than the traffic will bear. Salesmen recommend switching to some other wood, but will the woods recommended machine as easily or as well? The answer is not in the textbooks. Another type of inquiry frequently received reads about as follows: "We are sending a sample of blank wood containing a machining defect that causes a great many rejects in our plant. What causes this, and how can we cure it?" The usability of the wood in question often depends on discovering the answer.

In recent years the machining problem has become more and more complex. For one thing a quality of finish that passed a generation ago is no longer considered satisfactory. This calls for better planing, shaping, turning, and sanding. In addition, machines of entirely new and improved type, like the automatic shaper and automatic lathe, introduce their own peculiar problems. Among relatively new wood products are fireproofed wood, casein-glued material, and plywood compressed far below its natural thickness. The usual machining practices are not satisfactory for such products. But the chief factor that makes machining more complex than formerly is the increased number of woods, both native and foreign, that are coming into fairly common use. For new native woods it is largely a matter of finding the best technique with present equipment. Tropical hardwoods are often considerably harder than our machines are designed to handle. With such woods either a reduced output per machine must be accepted, or stronger and more highly powered machines must be developed. Either course spells higher cos for the finished product.

Any wood probably can be machined well, provided all conditions are right. Turnings, for example, can be made in such diverse woods as balsa and lignumvitae on the same lathe but naturally under very different operating conditions. Hackberry, one of the problem woods of the Mississippi Delta, produces 80 percent of defective pieces when planed with knives at a cutting angle of 30 degrees. Such lumber is fit only for rough or concealed work. But reduce the cutting angle to 20 degrees and only 7 percent of the hackberry pieces are defective, which is about as good as any of the better known woods. Many of the minor species are little used not because they cannot be machined well, but because they machine well only in a narrow range of conditions, - and these conditions, which are being systematically determined at the Forest Products Laboratory, are not yet well known among wood craftsmen. With some woods the dryness at the time of machining is an important factor. Basswood, for instance, yielded approximately 2 times as many defective pieces in planing at 12 percent moisture content, and 3 times as many at 20 percent, as it did at 6 percent moisture content. Magnolia, on the other hand, was not greatly affected by moisture content. Rate of feed, speed, and many other factors also affect the results, and a large part of the machining problem consists in searching out the optimum combinations.

SECOND YEAR OF STATE FIRE TRAINING IN NEW HAMPSHIRE

By Kenneth P. McReynolds, New England Forest Emergency Project

In the June 10 issue of the Service Bulletin, Mr. A. B. Hastings summarized the training in fire suppression which had been given to men in New England in 1939. Since the project practically has been taken over by the State officials the purpose of this article is to summarize the final participation by the Forest Service.

The larger fires in 1939 revealed that there was a shortage of trained scouts and other overhead. To meet this deficiency 68 local men were selected by the town wardens, 7 to 12 in each fire district. In cooperation with the Forest Service, those men were given a full day's training in the field in fire scouting. At those meetings, the men were trained not only in mapping but also in fire behavior, communications, and organization. The follow-up of this one day's field work consisted of two sets of problems, an examination on the factors influencing the spread of fire, and on organization and modern fire fighting technique. All but one of the 68 men completed the entire course.

Along with this, a fire plan for town fire wardens was developed and forms were printed for listing of overhead, equipment, and transportation available in each town. Thus far 74 towns have had meetings which were attended by the town fire warden, deputies, and other key individuals. At those meetings the town fire plan was prepared and also considerable time was devoted to organization and modern fire fighting technique. It is expected that such meetings will be held in virtually every organized town in the State. A number of the towns have in addition requested assistance in holding drills for their town crews in the progressive method of fire line construction and/or portable power pumps. Both types of training meetings were held during the evening and those who attended did so on their own time and at their own expense. There have also been approximately 300 local men in the DA commuting crews and 600 WPA crews who have been thoroughly drilled in progressive methods of fire line construction, the use of tools and portable pumps. Many of these men are already a part of the Warden's call crews and others would be available in the event of a major conflagration.

The most important phase of the program has been the development of a State Training officer who was added to the State Forester's staff on July 1. This man has been Town Fire Chief and a Deputy Warden. During the past year, he was associated with the hazard reduction program and became outstanding as a trainer. He has gradually taken over the Training Program and, in addition, goes to as many of the larger fires as possible to aid with the organizing of crews and to do actual training on the fire.

At the present time, a Manual for Wardens and Deputies is being prepared by the State Forester. This Manual will cover the Warden's and the Deputy's job: Fire prevention; fire equipment; actual suppression and the preparation of reports and bills.

There has been on the part of some people considerable alarm as to what would happen following the hurricane. However, in spite of the fact that the State had almost twice as many fires during the 1939 period as it had on an average during the previous ten years, the average acreage per fire was reduced almost an acre, to 8.2 acres per fire. During the spring fire season of 1940, this acreage was again reduced to slightly over four acres per fire. The fall fire season is now approaching and it might be, so far as training by the Forest Service in this section is concerned, "Step 4."

COMMENTS ON KEPLINGER'S ARTICLE

By W. I. White, Manistee

Mr. Keplinger's article on "'Scientific' Management Versus 'Paper Work' and Inspection" in the Service Bulletin of September 16 intrigues me very much.

It is admitted that the best control at the least expense will be achieved through the most efficient integration of the various means of control, of which inspection is but one. I agree too that under modern conditions there may be a tendency to give inspection a greater weight than it deserves in this balancing of methods.

However, the thought has been growing upon me that the whole machinery of control within the Forest Service is more cumbersome than it needs to be. If this is true, then a certain portion of the inspection, as well as some of the other functions, may be considered as a necessary evil. But how necessary?

A great many of our standards and procedures are either handed down to us, or are based upon standards and procedures from a higher level of authority. Each function performed by the Forest Service, such as timber management, grazing, accounting, has a series of procedures of its own. There are many of these functions and when all of them get down to the tree roots, the Ranger level, there is a tremendous galaxy of procedures to be remembered and put into execution. The more varied the functions on a single district the more complex and voluminous is the routine of daily administration to the single individual, the District Ranger who is responsible for taking action. I believe this maze of routine could be greatly simplified by more correlation at the top.

The instructions for the project work inventory (in the Forest Service Manual) give eight major divisions of National Forest work which are broken down into a functional classification of 38 items. The composite job list for analysis of executive work load classifies

Forest Service business into nine categories, of which only seven correspond with the classification in the project work inventory. These nine subdivisions are broken down into 216 items, of which very few can be combined and correlated with the 38 items of the project work functional classification.

And yet, every bit of project work planned for or accomplished requires its quota of executive time which likewise must be planned for and recorded. Why should project work and executive work be classified under two separate but parallel systems? Correlation of instructions would simplify the machinery for control and reduce the need for inspections, as well as some of the other mechanisms referred to by Mr. Keplinger.

Again, - we have a filing scheme which separates Forest Service activities into 14 major groups, and yet the subjects about which we correspond are the very same jobs about which we have made plans either in the project work inventory or in the executive work category, or both. Here too, why should not the subject matter be classified the same way in our correspondence as in our planning; why should not the various subdivisions be correlated; why should not the symbols used in designating activities be consistent wherever found? For example, why should Timber Management activities be referred to in the filing scheme under the letter "S", in the executive work load analysis under the letter "B", and in the project work inventory under figure "2"?

Once more -- there are 46 items in our accounting classification, and yet the objects of our accounting are the very same jobs and functions concerning which we carry on correspondence, make executive work plans and project work plans.

It is my firm belief that in this correlation of instructions lies the possibility for great simplification of the ordinary routine of doing business. This simplification would render more efficient the task of administrative control, would reduce waste motion in the organization and result in a greater return for the funds expended. For the simpler the routine, the less time and energy it consumes - the fewer gears to mesh, the less the loss of energy between the power and the business edge of the machine.

WELLSVILLE MT. WATERSHED -- A PROBLEM AREA IN UTAH

By A. G. Nord, R.4

The Wellsville Mountain watershed of northern Utah was the last link of the Wasatch mountain chain to be brought under management and organized fire protection when on September 9, 1939, the President by proclamation included this area of 43,300 acres within the boundaries of the Cache National Forest. Twenty thousand acres of this watershed had been added to the Cache National Forest on May 25, 1936.

Wellsville Mountain presents a typical case of wild land misuse in Utah where, through years of repeated burning, unregulated grazing and over-cutting of timber, the natural vegetative cover had been destroyed or reduced to such an extent that its restraining influence on run-off from the steep mountain slopes had been lost, and to the extent that accelerated erosion and an acute flood problem had developed. Also because of accelerated run-off of rain and snow water, a shrinkage in natural flow water supplies in streams and springs of as much as forty percent, over the period since settlement, was noted according to reports from the dependent communities affected.

Eighteen dependent cities, towns, and agricultural communities, with a population of about 10,000 people, have invested $1,070,000 in water supply systems to divert water for culinary use from this watershed. This is equivalent to $17 per acre for the area in the unit. The grazing value of these lands ranges from $1.50 to $3.00 per acre.

The run-off from the damaged and denuded lands, after a sudden heavy storm on July 7, 1937, resulted in a mud-rock flood, the first of great intensity since settlement of the valley about 70 years ago. Water systems and farm lands were damaged and mud was deposited in the streets of Mendon. The Hyrum-Mendon canal at the east base of the mountain was filled with mud, rocks, and silt, which cost the farmers $1,800 to remove. Use of the canal for the transmission of water from the Hyrum reservoir, a Federal reclamation project, to irrigated lands was disrupted for a period of ten days, resulting in much crop damage. The Hammond canal along the west base of the mountain was likewise filled with debris for a distance of one-half mile, which cost $2,000 to remove. Here also the lack of irrigation water for two weeks in the midst of the irrigation season resulted in losses to farmers. In many of the ravines and small washes, gullies up to 30 feet in depth were scoured out by the force of the mid-rock flows. Needless to say, the people in the communities concerned were alarmed by the situation, and it was largely through their persistent efforts that the area was finally added to the Cache National Forest in 1939.

At the time of the addition, land control on Wellsville Mountain was divided about as follows: 5,974 acres of Public Domain under Grazing Service administration, 1,560 acres of Utah State land, 3,504 acres of railroad land, 400 acres of county tax deed land, 323 acres municipal, 365 dry farm, and 31,174 acres of other private lands.

When the area was included in the Cache National Forest, the obvious problem was to secure better land management, and the best way to do this was to place the land in public control. Accordingly, a committee consisting of representatives from the County Agricultural Planning Boards, Extension Services, Farm Bureaus, the County Commissioners of Box Elder and Cache Counties and from the cities, towns, and agricultural communities affected was set up to lead the effort for bringing all private lands into public ownership. The committee set as its ultimate objective the obtaining of permanent administration and rehabilitation of the watershed through the National Forest program.

At the time the addition was made a land exchange had been in progress whereby 3,079 acres of Public Domain within the unit was being traded to a stockman. Under the proposal, desert lands in western Utah were being exchanged for this valuable mountain watershed to consolidate desert range lands under the jurisdiction of the Grazing Service. The Wellsville Mountain committee filed a vigorous protest with the General Land Office against these watershed lands passing into private ownership, as a result of which the exchange was cancelled.

The committee worked further, and, because of its representations before the State Land Board, an agreement was reached that those State tracts above municipal water supply intakes would not be leased for grazing at any time in the future, and that the other State owned areas would not be leased for a period of five years. After five years the State land would be open to grazing only under such regulations as the Forest Service would approve. Through action by this committee similar cooperation was secured from the railroad company with respect to the management of its lands.

Although these efforts resulted in good progress toward better land management on Wellsville Mountain, the large acreage of private land within the area still remained the figurative nut that had to be cracked before the eighteen communities surrounding this mountain range would feel reasonably safe against further exploitation of their watershed lands. In order to further this program, a general meeting in Brigham City on June 18 of this year was arranged, where a resolution was unanimously adopted that the counties and municipalities cooperate to the extent of approximately $13,000 toward the purchase of damaged land now in private ownership, with a definite understanding that land thus acquired would be donated to the Federal Government for administration by the Forest Service.

A non-profit corporation has since been formed to represent these agencies with power to receive funds, purchase land, and to complete the transfer of the area acquired by donation to the Federal Government.

Fire protection on Wellsville Mountain is now fully organized by the Cache National Forest covering all land ownerships; also remedial action has been initiated on the Federal, State and municipal lands to bring about improvement. In many instances private land owners are cooperating in the proper handling of grazing on their own lands. A cooperative agreement has been made between the Forest Service and the Soil Conservation Service for the use of CCC labor in the treatment of denuded areas as rapidly as the lands come into public ownership. All of these rehabilitation efforts are directed toward a quick restoration of the vegetative cover on this watershed and the prevention of accelerated erosion and floods.

The Wellsville Mountain watershed is a typical case of short-sighted land disposal and exploitation policies where a few years of unwise private use necessitates prompt and expensive action by public agencies to save the dependent communities. These lands passed to private ownership as railroad grants and grazing homesteads. The re-acquisition of them will cost an average of $3.00 an acre, in addition to which up to $10.00 per acre must be spent toward the restoration of cover on certain areas. Why did not Uncle Sam keep this land when he had it?

SWAMP BLACK GUM IN THE SOUTH

By Wilbur R. Mattoon, Washington

Curious how a misnomer or an error sometimes persists for decades in the popular mind -- even more strange that such should persist in the scientific mind. Yet that seems to be the fate of the swamp black gum of Sudworth's Check List.

Swamp black gum (Nyssa biflora) is a close relative botanically of the well-known and widely occurring black gum (Nyssa sylvatica) of the eastern half of the United States. Swamp black gum ranges throughout the lower South and is known to be confined to gum swamps and other swamps and very wet soils.

Somehow swamp black gum has escaped popular recognition and for that matter also pretty generally scientific recognition. Foresters are mostly acquainted with black gum. It is a little strange that more foresters in the lower South have not made a fair speaking acquaintance with a tree as common as the swamp black gum. An interesting parallel case further north is that of the common pignut hickory (Hicoria glabra) and its close but common relative, the red hickory (Hicoria ovalis).

In 1913, I first "met up" with swamp black gum and found it very abundant and prevailing in the Okefenokee Swamp. Later, I was much gratified when W. W. Ashe fully confirmed me in this observation. As recently as the summer of 1940 specimens of the prevailing gum from four different locations in the swamp were identified by Mr. W. A. Dayton's office as swamp black gum. Years ago, I identified the species in Louisiana and in swamps as far north as western Tennessee. In southern Alabama one time I recall being much impressed by observing a tree of black gum on a dry ridge near a wet flat filled with the swamp black gum. The contrast in appearance of the two species was noticeable. The trees are different, — more different, in fact, than some of the standard descriptions, written mostly by northern botanists who unfortunately only occasionally make really exploring trips in the South.

Swamp black gum grows to be a fair-sized tree but not to the large size of the black gum. It is not as straight in development of the trunk. It has a grayer bark and a lighter colored, narrower, and more pointed leaf. There are botanical differences in the small "berry" or fruit that are minute in character. It is practically confined to swamps or other wet soils. Obviously, black gum and swamp black gum are each readily distinguishable from tupelo gum (Nyssa aquatica) with its large leaves and fruit or "plum", and also from the sweet gum (or red gum) (Liquidambar styraciflua) with its star-shaped leaf. The last is very abundant through most of the South but always on relatively dryer locations of low or bottomlands.

While there is much ground yet to be covered in determining fully its local and geographical occurrence it seems fairly safe to say that swamp black gum prevails and composes the bulk of the well-known "gum" swamps and also occurs very commonly along stream courses and in the flatwoods of the lower South. Equally, it seems that this species has been extensively and almost invariably mistaken for its well-known sister tree, the black gum. In this connection one is reminded of the period of many years when slash pine was popularly and, also alas, technically mistaken either for loblolly pine or for longleaf pine.

THE SHORT-TERM MAN PROBLEM

By H. L. Plumb, Snoqualmie

Yesterday a short-term man came in and stated that he was severing his connections with the Forest Service. That in itself, of course, is minor. He was one of the faithful, trusted, and efficient short-term woodsmen who have been coming back year after year. His name isn't Jim, but it will do. Jim is big of stature, his eyes are keen, you can tell by looking at him that he loves the woods and Forest Service work. He can do anything from fixing the ranger's pickup, to climbing cliffs and rescuing damsels in distress. He has the slow, easy way which does not unduly frighten the wild animals of the Forest nor excite the tourist using our campgrounds when he has to speak a word of caution.

He quit a job last spring which paid $12.50 per day to accept a patrolman's job at $130 a month for a 2½ months' season. Why?-----Largely because he liked the work. He had also heard of the benefits of civil service and he thought perhaps something was being done about it so that the period of work might be lengthened and he could make a living for his family. But this summer he has deliberately studied the problem and he has come to the conclusion that there is nothing in it for him. His eyes told me that it was useless to argue. His mind was made up and he would no longer be available.

There is nothing remarkable in this one instance, but the startling thing is that there are many others who have come to the same conclusion. The thoroughly qualified, experienced men whom we have depended upon for years are finding the situation hopeless and seeking employment elsewhere. These are the men who have been called on to go to other districts or other forests to help out in a critical situation. On the district which Jim is now leaving there is only one man left whom I would recommend as being sufficiently experienced in fire work to send to another district, and that man has told me that he is seeking private employment and if he can get it on a year-long basis he will not be back. The same thing is true on the other districts on the Forest. Outside of our CCC foremen and the regular force, there are not a half dozen men that I could call on to go to another forest to help out in a pinch and be sure they would give a good account of themselves. That isn't saying that our short-term force isn't good, either. I would stack them up against those on any other Forest so far as loyalty, enthusiasm and general ability are concerned. But most of them have not yet had the opportunity to get the necessary experience.

The defense program has made it possible for these experienced woodsmen to secure dependable private work at good pay. Perhaps the case on the Snoqualmie is different from other Forests because of its proximity to Puget Sound where many bombers and destroyers are being built. Unemployment insurance is another good reason why they seek private employment.

We used to be able to employ our protection men to do work now largely done by CCC. We could assure them six to eight months of work. But it's a different story now. I imagine, however, that other Forests are having the same difficulty. It simply means that the job from now on is going to be tougher. There will be more training work to do and there will quite likely be more losses.

We have done a lot of talking about the problem of the short-term man but really little has been done so far to give him a living wage so that we could hold him. Cooperative funds have been used so far as possible to extend the time of these men. Road and trail funds have been used but they have been rather meager the past few years. Ranger Vallad is planning this fall on making a small timber sale to some of his short-term men in order to give them something to do during the winter months. In the pine region particularly I believe the timber sale idea has good possibilities. I believe the Service would be justified in using the services of the short-term men to take out decadent timber and also beetle-infested timber, and stack it up alongside roads for sale, provided funds could be found to start the operation and laws could be secured to put the receipts into a revolving fund which could be used in future operations. I believe in a good many cases this could at least be made self-sustaining and in other cases yield a profit.

Anyhow, we have a problem. What's your answer?

PUBLIC LIKES "TREE OF LIFE"

By W. S. Brown, Los Padres

Two or three very outstanding films were recently shown at a local theater. We thought they were excellent but the audience took them phlegmatically. Then "The Tree of Life", recent Forest Service film, 2 reels, was shown. At its conclusion the entire audience broke into applause. Yes, it's a good picture (From "California Ranger")

THE GAME SPECIALIST AND THE PUBLIC

(From a paper by Geo. K. Aiken, Member, Oregon State Game Commission, presented to the 20th Annual Conference of Western Association of State Game and Fish Commissioners)

It is pertinent to consider whether we, and the agencies with which we share responsibility for the welfare of the wildlife of our several States, are in any degree exceeding the bounds of amicable public relations, by arbitrary rulings and regulations, or by intransigent refusal to examine the policies upon which we act, when cooperation between those agencies is required.

The degree with which that cooperation is attained is the measure by which can be judged our adherence to the principles of democracy. The degree with which, either as individuals, Commissions or Bureaus, we insist upon adherence to rules or regulations of our own making, without consideration of the proposals of associates, or in disregard for the sentiments of the public, is the measure of our adherence to the philosophy of Bureaucracy or dictatorship....

It is, therefore, in a spirit of self examination that the discussion attempted here today will follow:

All governments, in all ages, have had as their essential function the division of the natural resources. Under various systems, this division has been made. While the surface of the earth, and the wealth beneath, has been made available to the individual to use for himself and society, in practically every form of government that right has been circumscribed. The individual has been given a limited title. But with respect to wildlife, that which does not lend itself to domestication, in every land, at least since the days of the Greek republics, ownership and control has remained in the public, that is, in sovereign, whether that sovereign was king, emperor, czar, State or Federal Government.

In the march upward from savagery man has taken this wildlife for his own use, either as an individual hunter, or in cooperation with his fellows, in tribe or clan. He took it where he found it, without regard to whoever claimed title to the land upon which that resource fed, until systems of government, with or without his consent, decreed otherwise.

While the Greeks and the Romans gave consideration to the manner of taking the wildlife of the forest and field, it is of especial interest to us to consider the development of law and custom concerning wildlife that has come down to us from our Anglo-Saxon forebears, to whom we are indebted for our democracy and our approach to the division of the natural resources of our country.

It is significant that in the Magna Charta, that great document which first gave formal expression to our way of life, is to be found the evidence that it was the arbitrary management of the forest of England, which inspired the protests against the tyranny of King John. In that day, 725 years ago, one-third of England was in forest reserves, according to historic records.

And the great document continues in Chapter 48 to decree:

"All evil customs connected with forest and warrens, foresters and warreners, sheriffs and their officers, river banks and their wardens shall immediately be inquired into in each county and ... shall within forty days of said inquest be utterly abolished, so as never to be restored."

That is what excessive bureaucracy led to 725 years ago.

Now all this happened in a land where conditions were not what they are in America today, but in which many of the elements are identical, insofar as these eleven Western States are concerned. But even though conditions physically differ, it must be remembered, human nature has changed but slightly, in those seven centuries. It was the human attributes of the administration of the forests to which the people of England voiced objection and from which they sought relief.

As State game commissioners, we are jointly charged with officials of the Federal Governmental agencies with administration of natural resources. It is worthwhile to inquire whether or not a parallel may be drawn between the conditions to be found here in the West today and that which prevailed in England prior to the Magna Charta. If such a parallel is found, then prudence directs that, consonant with our mutual responsibilities, we seek a solution through democratic processes.

While, in 1215 A. D., only one-third of England was within forest areas, over which the sovereign exercised dominion; today in 1940 A. D., in the eleven Western States, the Federal Government has given almost complete power to one man "to regulate and promote use" on forty-one percent of the total area.

This one-man dominion varies from 22 percent of Wyoming to 82 percent of Nevada. Our other Western States supply the following percentage of their surface to various Federal bureaus: California 37, Colorado 32, Idaho 56, Montana 24, New Mexico 28, Oregon 43, Utah 62, and Washington 40.

That it is humanly possible for one man, or his designated subordinates, to administer that vast domain in the common interest will not be denied. But that such an administration will prevail over long periods of time is highly improbable. This is true because there must be interposed delegated authority with its inherent human weaknesses.

Insofar as the conservation of wildlife in these Western States is concerned, the Federal agencies with which we as State commissioners are most intimately associated are the Forest Service, the Grazing Service, and the Fish and Wildlife Service.

Having had experience with them, for many years, we will grant, without fear of contradiction, that they constitute as high-minded, patriotic, loyal group of men as can be found anywhere. That they are imbued with the highest motives of service we will gladly admit. That they have contributed to the national welfare, by their devotion to the conservation of wildlife, it is a pleasure to acknowledge. So nothing that has been or will be said should be deemed in anywise to reflect upon any one of them.

It is none the less true that by reason of the far-flung area of their operations, and the rigidity of their organizations, they do constitute a bureaucracy and cannot escape from the weaknesses which are inherent in all bureaus. These weaknesses have been recognized by students of government in every land. . . .

Since both the Federal and the State bureaus are charged with the responsibility of administering the wildlife resources for the social good of the public, not as masters but as servants, policies, rules and regulations must be so arrived at that they will gain that acceptance which reflects confidence of the public in the management of the trust. That is the democratic way.

In view of the experiences we have had, in these Western States, in cooperation with various agencies, it must be admitted that the points of agreement have been greater than those of disagreement as to policy and practice. Therefore, it is manifest that if we are each determined that for ourselves we will not be guilty of the sins of bureaucracy, a program of cooperation based on mutual respect and confidence is easily attainable. In fact, this has been attained, in practically all of the States, save where here and there an over-zealous individual has succumbed to the yearning for power.

If we here today, recognize that we are but temporarily clothed with power, to perform certain limited functions, and are willing to confer with associated agencies, similarly clothed, with a determination to maintain our American traditions, there will be no fear of the imposition of any arbitrary rule such as G-20-A or any similar declaration of authority which violates the compact which made us a part of the federal union. When such a spirit prevails no such rule will find fertile ground for growth.

But it is not enough to entertain such a spirit. It is necessary that the public which we serve should know that this is the policy we are following. When the public knows, and it is our duty to have that knowledge disseminated, the public will demand that the bureaucrat who exceeds his authority cease that practice. If the public does not thus circumscribe the individual or bureau, then the democratic processes have failed, and our discussion has been in vain. This, we will all agree, must not come to pass.

It is our part as State game officials to so approach our responsibilities that the cooperating Federal agencies will accord to us the same measure of confidence which we repose in them. That they will recognize that, as State officials, we do not yield to them one iota more of devotion to the principles of conservation than they claim for themselves. That they will recognize, and the public will acknowledge, that the cause of wildlife is as safe in the hands of State officials as in those of the Federal Government. That the public will acknowedge, and the Federal officials will agree, that through close personal association, in the training they have received, in the breadth of viewpoint they hold, State commissions and their employees are as capable of managing the wildlife within their borders as are those who have reached preferment through the processes of a Federal civil service.

And lastly, by this program of performance these State commissions will again demonstrate that when the compact of the States of this federal union was written it was a wise prevision that the custody of the wild resources was left with the individual States to administer.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

BISWELL, Harold H. Subterranean clover growing well at the San Joaquin experimental range. Calif. Wool Grower 16(39): 4-5. Sept. 24, 1940.

BROKENSHIRE, W. J. Mineral recreation area--Lassen national forest. Chapman's Mag. 1 (1): 33-35. 1940.

BUELL, J. H. Effect of season of cutting on sprouting of dogwood. Jour. Forestry 38: 649-650. Aug. 1940.

BYRAM, G. M. Sun and wind and fuel moisture. Jour. Forestry 38: 639-640. Aug. 1940.

_______A tree-crown profile projector. Jour. Forestry 38: 629-631. Aug. 1940.

DAVIS, Kenneth P. Economic aspects of managing western white pine forests. Northwest Science 14: 26-32. May 1940.

DAY, G. M.. Top soil changes in coniferous plantations. Jour. Forestry 38: 646-648. Aug. 1940

FRIEDL, Armella C. American parachutists in Forest service. U. S. Air Services 25(9)12-14, 32. Sept. 1940.

HORNIBROOK, E. M. A preliminary yield table for selectively cut lodgepole pine stands. Jour. Forestry 38: 641-643. Aug. 1940.

HARRIS, E. E. Utilization of waste lignin: current chemical research. Indus. and Engin. Chem. (Indus. ed.) 32: 1049-1052. Aug. 1940.

HULL, A. C., Jr. Bulbous bluegrass, valuable for reseeding intermountain ranges. Nat. Wool Grower 30(8): 32-34. Aug. 1940.

HUNT, G. M., and SNYDER, T. E. International termite exposure test: 11th progress report. Amer. Wood Pres. Assoc. Proc. 36: 378-391. 1940.

KIRCHER, Joseph C. "Chinooks" of the Chattahoochee. Outdoor Georgia 1(3): 15, 22. July 1940.

KUENZEL, John G. Ohio farm forests pay dividends. Ohio State Grange Mo. 43(9): 4-5, 14. Sept. 1940.

McARDLE, R. E. (Book review). Rocky Mountain trees, by Richard J. Preston. 285p. Ames, Iowa, Iowa state college press, 1940. Jour. Forestry 38: 666. Aug. 1940.

MACDONALD, Alan. Turpentine--an old Southern industry. Naval Stores Rev. 50(20): 20. Aug. 17, 1940.

McDONALD, C. H. Stock water and range reservoir experiments. Amer. Cattle Producer 22(2): 3-6. July 1940.

MACKAYE, Benton. Democracy in flood control. The lesson of Hill, N. H. Reprinted from Survey Graphic 29: 468-470. Sept. 1940.

_______The spirit of the wilderness. Living Wilderness 5(whole no. 5): 16-17. July 1940.

MACLEAN, J. D. Relation of wood density to rate of temperature change of wood in different heating mediums. Amer. Wood Pres. Assoc. Proc. 36: 220-248. 1940.

MATTOON, W. R. Size of sticks for improved wood stoves. Jour. Forestry 38: 657. Aug. 1940.

MINCKLER, L. S. Early planting experiments in the spruce-fir type of the southern Appalachians. Jour. Forestry 38: 651-654. Aug. 1940.

NEWLIN, J. A. How colour and checks help determine exact size of knots. Canada Lumberman 60(16): 17. Aug. 15, 1940.

NEWMAN, S. A. The grid-area method for determining areas of irregular figures: an application of the mean ordinate principle. Jour. Forestry 632-635. Aug. 1940.

RULISON, D. E. A useful multiple tally register holder. Jour. Forestry 38: 659-660. Aug. 1940.

SIEKER, John. Farewell to the wilderness. Living Wilderness 5(whole no. 5): 19. July 1940.

_______The national forest wilderness system. Living Wilderness 5(whole no. 5): 5-6. July 1940.

SMITH, Helen B. Forest service use of aerial photographs. U. S. Air Services 25(8): 15-16, 28. Aug. 1940.

SPARHAWK, W. N.. (Book review). A bibliography of tree-ring analysis, by Edmund Schulman. Tree Ring Bull. 6: 27-39. 1940. Jour. Forestry 38: 672. Aug. 1940.

_______(Book review). L'Etat et la propriete forestiere privee, by Roger Danre. 163p. Paris, Librairie du Recueil Sirey, 1938. Jour. Forestry 38: 666-667. Aug. 1940.

STEWART, George, (With W. P. COTTAM, Univ. of Utah), and HUTCHINGS, Selar S. Influence of unrestricted grazing on northern salt desert plant associations in western Utah. Jour. Agr. Research 60: 289-317. Mar. 1, 1940.

_______(With W. P. COTTAM, Univ. of Utah, senior author.) Plant succession as a result of grazing and of meadow desiccation by erosion since settlement in 1862. Jour. Forestry 38: 613-626. Aug. 1940.

SUTLIFF, C. B. Coordinating fire control plans. Jour. Forestry 38: 627-629. Aug. 1940.

WELLNER, C. A. Relationships between three measures of stocking in natural reproduction of the western white pine type. Jour. Forestry 38: 636-638. Aug. 1940.

EXCERPTS FROM "A NATIVE AT LARGE" BY JONATHAN DANIELS IN "THE NATION" FOR AUGUST 31, 1940

"In a small voice which I wish were much louder I would like to say that while we move, and properly, to be ready to defend this land, we are already forgetting the land we defend. I mean the land--the actual earth out of which our food grows and our forests, which is at least as much America as the people on it. I know we do not mean merely to defend a geographical area, but I lack the faith that freedom for many of us could flourish in a desert. It does not flourish now in America where the land is too worn for men to farm it in security. War would mean a new wasting--an imperative, maybe patriotic wasting, a wasting nevertheless. . . . It is time people began to realize that conservation is a part of preparedness. . . With famine rising again--with the possibility that food may win another war--it is a cockeyed country which does not consider, even in war terms, land use in the future in the light of land use in the past. . . .

"Once war is here we cannot stop to count the consequences of cutting down the pine trees--to weep for the washing of our hills into our rivers. But we can recognize in any intelligent program of preparedness that our strength is still in our earth. Time may not suffice for the development of any plan for the wisest use of our land even for our defense of our land. But already we are building battleships which will not be ready for years. So we admit the possibility of some future for ourselves as well as for America. No program for its protection--no program for power--will be effective which neglects the land itself."

THE EDITOR DISCOVERS

The exigencies of the fire situation in Region 1 last summer made it impossible for the Region to furnish its planned contribution to the 4th of July parade in Missoula - a string of pack mules. Instead of the proposed display there appeared in the parade an old broken-down fire truck with the following explanatory sign "Everything else out on fire. Forest Service." In submitting photographs of the Forest Service entry to the WO collection, the Region writes: "Strangely enough this old broken-down car with the explanatory signs created as much if not more favorable comment than many of our more ambitious displays."

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The fortieth annual meeting of the Society of American Foresters will be held in the Mayflower Hotel, Washington, D. C., December 19-21, 1940. Dr. C. F. Korstian, Dean of the Duke School of Forestry, Durham, N. C., who is President of the Society, has announced that a program of broad professional interest has been arranged. Five half-day sessions are planned.

The opening, Thursday morning session, December 19, will have as its theme Forty Years of Forestry. A group of well-known foresters will discuss the topic "Past and present policies - Federal, State, and private. How will they guide our future progress?" For Thursday afternoon is scheduled a panel discussion of one hour on "How can we best win public support for forestry and forest conservation through information and education?" The balance of the afternoon will be devoted to a thorough presentation of the subject of Forestry and National Defense.

On Friday morning, December 20, will be held the regular annual session devoted to Society affairs. Friday afternoon will be devoted to the presentation of papers on New Developments in Forestry. The annual banquet will be held Friday evening.

The final, Saturday morning session, will be devoted to a discussion of Regulated Forest Management in the United States. Authoritative speakers, representing Federal, State, and private agencies, will present their viewpoints and answers to the question, "Of what should proposed regulation of private forest management consist?"

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Estimates of big game animals on the National Forests as of December 31, 1939, compiled by the Washington Office Division of Wildlife Management are as follows:

Antelope - 19,000; black bear - 59,000; grizzly and Alaska brown bear - 5,200; whitetail deer - 477,000; mule deer - 942,000; Columbia blacktail deer - 238,000; elk - 144,000; moose - 7,300; mountain goat - 18,000; bighorn - 9,150; peccary - 7,500; and wild boar - 780.

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Region 5 writes that the technical staff of Camp City Creek (F-157, Co. 909) San Bernardino Forest, rightfully boasts of a truck driving record of 1,200,000 miles in the past 7 years without a single injury to an enrollee or member of its personnel. This camp has 10 stake trucks, 4 pickups, 1 patrol grader, and an occasional tractor.

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Fred Van Dyke, veteran ski official succeeded Arthur V. Allen as manager of Timberline Lodge on the Mount Hood National Forest on October 1, according to an item in a recent issue of the "Oregonian", Portland, Oregon. Van Dyke, a native Swiss, has been very active in winter sports since his arrival in this country in 1922. He has been a member of the Cascade Ski Club since 1929 and has served as its president. In 1939 Van Dyke was president of the Oregon Winter Sports Association. Mrs. Van Dyke, also a native of Switzerland, will serve as hostess and director of entertainment.

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According to estimates recently compiled by the Washington Office Division of Wildlife Management, the National Forests contained the following numbers of fur-bearing animals as of December 31, 1939:

Fox - 190,000; badger - 50,000; beaver - 170,000; marten - 71,000; mink - 145,000; fisher - 880; wolverine - 540; otter - 8,000; muskrat - 340,000; opossum - 370,000; raccoon - 128,000; ring-tailed cat - 12,000; skunk - 390,000; weasel - 420,000; cottontail rabbit - 260,000; snowshoe rabbit - 180,000; jack rabbit - 14,000; eastern gray squirrel - 960,000; abert squirrel - 162,000; red squirrel - 87,000; woodchuck (marmot) - 13,000; and porcupine - 160,000.

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SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 23 Washington, D. C. November 11, 1940

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FORESTERS LISTED ON "WALL OF FAME"

At the World's Fair of 1940 in New York a "Wall of Fame of the American Common" contained the names of American citizens of foreign birth who have made notable contributions to living, ever-growing democracy devoted to peace and freedom.

Of the 38,000,000 people who came to our shores during the last 100 years, committees in various fields of achievement selected some 600 American citizens of foreign birth who have made outstanding contributions to American culture in arts, literature, industry, education, government, religion, science, et cetera. Among the 600 American citizens of foreign birth there occurred the names of two foresters: Bernard E. Fernow and Raphael Zon.

THE CHEMICAL SEASONING OF WOOD

By W. Karl Loughborough, Forest Products Laboratory

Foresters all know there are certain hardwoods, such as the southern swamp-grown oaks, so difficult to season that the species are practically unmarketable. Recognizing this problem the Forest Products Laboratory has during the past few years been working on seasoning such refractory woods by first soaking the wood in a concentrated chemical solution for a period -- depending on conditions -- of from half a day to a week or more and then removing the wood from the chemical bath and air drying or kiln drying it by conventional methods. By this means, which brings about the drying of the interior of the wood before the exterior, the Laboratory has been able to dry planks up to 3 inches in thickness of swamp-grown overcup and other refractory oaks without degrade to a moisture content of 5 percent. Previously it was considered impossible to dry this kind of material in the best kilns in the world, even under the most favorable conditions, without complete 100 percent degrade from checks and honeycomb.

Various chemicals are available that are suited for chemical seasoning, the use of any particular chemical depending upon the use to which the chemically seasoned article is to be put. For example, there are many uses in which items treated with ordinary house salt are highly suited for the purpose; on the other hand, in some uses the effect of the presence of the salt remaining in the wood, particularly as to corrosion and condensation, may be objectionable. Additional small-scale tests are therefore needed to determine the best chemical and treatment for any particular use.

A combination of urea and invert sugar, which can be used where the corrosive effect of salt would be a drawback, has given some remarkable results, particularly in the case of large 12 by 12-inch Douglas-fir timbers which were removed from the chemical bath and dried in the direct summer sunshine without subsequent checking. A number of other chemicals, some of which produce especially desirable properties by their presence in the dry wood, have been tried. For example, monoammonium phosphate, which is a good fire retardant, and zinc acetate, which is a fair fungicide, have been used on swamp oaks with satisfactory results.

The question of the cost of chemical treatment is important, and, in view of the fact that small-scale laboratory tests do not permit a definite estimate of commercial costs, the Laboratory is now aiming at a commercial trial with hardwoods as the next step in perfecting the method. Since the cost of the salt will not add more than 40 cents per thousand feet for 1 and 2-inch southern swamp oak, and since the cost of handling into and out of the tank probably will not be more than $1.40 per thousand feet, the method appears to have significant commercial possibilities, especially for the hardwoods that are now unmarketable because of excessive seasoning degrade.

MR. KEEN COMMENTS FURTHER ON "CLIMATIC CYCLES IN EASTERN OREGON AS INDICATED BY TREE RINGS"

F. P. Keen, author of the article on the above subject, a digest of which appeared in the September 30 issue of the Service Bulletin, writes Assistant Forester M. L. Merritt, R-5, as follows:

"Thanks for calling my attention to Mr. Headley's review in the September issue of the Service Bulletin of my climatic cycle paper. I think Mr. Headley did an excellent job of summarizing the highlights of this paper and giving the meat of its conclusions without trying to emphasize the more popular angles which are usually the only ones brought out in newspaper or digest articles.

"While the growth reduction since 1917 is the most marked of any in the last 650 years, I am now somewhat skeptical that this can be explained entirely by deficiency of precipitation. The change in average rainfall since the 'normal' period of 1900-1919 is not great enough to account for all of this growth deficiency. I suspect that a good deal of it must be due to physiological drought brought on by increased transpiration of all the vegetation which has built up in the last 30 years, plus some reduction in rainfall which has brought about a critical competition for moisture between trees and all other vegetative cover. So moisture depletion through transpiration may be a large part of the story."

Mr. Merritt makes the following comment:

"Mr. Keen raises an interesting question as to why tree growth has slowed up during the last 20 years, and he indicates that possibly it may have been due to an increase in the vegetative cover. If this is the case, the converse might be true that periods of rapid growth might possibly be due to periods of lack of vegetative cover, which lack might be related to the effects of fires that occur at that time. I thought you would be interested in this comment. It is one that deserves further study."

NATIONAL SKI ADVISORY COUNCIL FORMED

By Robert S. Monahan, Washington

It was a mild spring day when Roger Langley, president of the National Ski Association, came to Washington last April. Late season skiing enthusiasts may have been cavorting on their favorite high slopes but people in cities like Washington were thinking of summer rather than winter vacations.

President Langley had an idea that needed months of warm weather to germinate. As president of the National Ski Association during the past four years he had observed that a surprisingly large number of present and potential skiing areas were within the National Forests. The Association, he concluded, had much in common with the Forest Service in encouraging the proper development of these areas. Closer relations between both organizations should be mutually helpful and the public would be the gainer.

Mr. Langley talked with Mr. Clapp and others in the Washington Office. He offered to appoint an Advisory Council comprising one member residing in each of the Forest Service Regions except Alaska and the Southern with himself as chairman ex-officio. These men would deal directly with our respective Regional Offices and would form regional councils as local needs developed.

The National Ski Association's offer was accepted tentatively and later, when all Regions approved the arrangement, a definite form of organization was decided upon. The Forest Service reasoned that as the grazing resource, for example, had been developed through the years in close cooperation with national and local stockmen's associations, why could not the newer winter recreation resource be molded from the same pattern?

President Langley has named the following representatives, each a recognized leader in skiing circles throughout his area and already familiar with our efforts in the winter sports field:

Northern Rocky Mountain	R. Brooke Ricker	Helena, Montana
Rocky Mountain	Robert S. Balch	Winter Park, Colo.
Southwestern	Edward Long	Prescott, Ariz.
Intermountain	Richard Durrance	Sun Valley, Idaho
California	Wendell T. Robie	Auburn, Calif.
North Pacific	Fred H. McNeil	Portland, Ore.
Eastern	Dr. R. S. Elmer	Bellows Falls, Vt.
North Central	Arthur J. Barth	Milwaukee, Wis.

This Advisory Council is now ready to function and in the words of its ex-officio chairman "These men are all enthusiastic about the council and being of whatever service they can to the Forest Service."

Our National Ski Association advisors represent an organization which was founded in 1904 and now numbers 300 member clubs and 40,000 individual members throughout the country. They are well qualified to help us solve many of the perplexing problems which arise in locating, planning, developing, and administering winter sports areas.

In dealing with this Advisory Council the Forest Service, of course, does not exclude cooperative relations with other groups not affiliated with the National Ski Association. But we do have an established procedure for helping to determine the attitude of organized skiing toward winter recreational developments in the National Forests.

TRAINING PROGRAMS

By P. Keplinger, Washington

Ten years ago the Regional Foresters, at their meeting in Washington, prepared and submitted to the Chief a training program. The Chief approved it, published it, and distributed it to the field. It has been the official program of the Service since 1930.

In his comments the Chief said: "I would like to see applied to the needed training of other positions, the same energies and determination which have made the guard training camps and the ranger group training practices so signally successful." This statement illustrates one of two weaknesses which the new program attempts to correct. First, the emphasis on certain groups almost to the exclusion of others; for example, our exceptionally loyal women employees, and second, the unintentional neglect of the special needs of Research. This new program gives special attention to clerks and other non-professional groups, and Research participated actively in its preparation. In fact, some of the best suggestions for the revision of the tentative program submitted to the field in August a year ago, came from Research Directors.

With further reference to the old program: During the past year or so I have asked a number of field officers about this official program. Most of them had never even heard of it. It would seem, therefore, not to have greatly influenced the work of the Service.

In line with this idea one of the Assistant Chiefs recently asked: "What steps need to be taken to assure that the particular jobs listed therein are done?" He added: "We do not want this to be just another publication but want it to result in actually having done the various things that are programmed to be done." In other words, he does not want this one treated as was the last. Some men at least didn't use the other because they did not know it existed. Is the new one being filed without reading?

Before adopting a program the Chief submitted the problem to the field for suggestions. He got a very helpful response. Should not this question of "follow-up" also be given consideration by the field before plans are made? If you have any ideas or suggestions on this phase of the problem, would you not like to submit them for consideration by the Chief?

(A revision of the Service-wide training program has recently been approved and distributed by the Chief. In it an attempt is made to provide for the training, as needed, of each class and group of employees in the Service. Our first programs stressed the training of guards and rangers. Now it is believed that all groups are on the same footing. It has been suggested that it would be a good idea to ask a number of employees in each of the various groups: clerks, accountants, sub-professional, supervisory, etc., to read the program and comment on this feature. Possibly voluntary comments will serve the purpose just as well. We know the field will be interested in such field comment and will reserve space for a number of them in our next several issues. - Ed.)

DANVILLE COMMUNITY FOREST RECORDS

Story V - Dollars Versus Wood In 1778

By Ernest O. Buhler, Washington

History books are filled with battles about Bunker Hill, Lexington, and Yorktown, but the Danville, New Hampshire, Community Forest records show what happened behind the fighting lines. Without any previous indications of grave political troubles, the record shows that an alarming meeting took place among the colonists in these backwoods of New Hampshire. It was held in the middle of the winter. The weather was cold and the meeting place in the unheated church was cold. No doubt the men were cold too. Nevertheless, on Thursday, January 5, 1774, at two o'clock in the afternoon the settlers met, discussed their problem and then penned these burning words hot with emotion:

"Resolved, That the most grateful acknowledgments are Due to the Truly Honourable patriotic Members of the Late Continental Congress for their assiduity in so nobly Defending and supporting the Rights of America Against the Wicked Machinations of an Abandoned Ministrey in Enslavein us and our Posterity. If Death shall be our portion in the Defence of our priveliges We are Ready to sacrifice our Lives for Liberty A True Entry Attest - Moses Colby Clerk."

They said "We are ready to sacrifice our Lives for Liberty." Later records show that they meant what they said. From now on and until the end of the war, the town books are filled with accounts of their preparation for the war and their participation in it. However, they still try to effect an amiable settlement with England, and a delegate is sent for a general congress "to beholden at Philadelphia on the 1st day of September Next for the Establishment of our Rights and Liberties upon just and solid foundation and for the Restoration of Union and Harmony between the Mother Country and the Colonies."

But, negotiations between the Congress and mother country for the restoration of harmony seemed to strike a snag and from then on they prepared for war.

In 1778 this small settlement of pioneers is still busy raising men for the Army. The extra expense caused by the Revolutionary War was met at first by direct taxation. They voted to levy a tax on the inhabitants and on the estates within and they voted extra taxes. The time came, however (April 9, 1778) when a direct levy was not practicable any more. They start to borrow money and they give notes on interest to pay the cost of hiring John Douglas, Jakes Gillies, and Charles Veron for three years in the Continental Army.

In the same meeting they elected a representative to represent them in Concord for the purpose of "laying a permanent plan or system of Government for the future happiness and well being of the good people of this State." Although matters dealing with National defense have priority, they have not forgotten their Community Forest. They voted to leave it to the Selectmen to procure the minister's wood from the Community Forest. Wood in 1778 had a peculiar value. To be sure a cord of wood from the Parsonage Forest is still a cord of wood and heats the same number of rooms in a house, but a Continental dollar will not buy as much of that wood as it formerly did. As a matter of fact, where one dollar formerly bought a cord of wood, it would now take seventy-five dollars to buy the same cord. The inflationary effect of the war was felt even in the backwoods of New Hampshire.

GUNPOWDER AND SNAKE BITES

By Benjamin Lucas, George Washington

I was indeed surprised to learn that the burning of a snake bite with gunpowder still had merit according to the article "Snake Bite" in the September 30th issue of Service Bulletin.

"Snakes of Maryland" by Dr. Howard A. Kelly says absolutely not, as does Bureau of Biological Survey - Wildlife & Research Management Leaflet B.S. 70; also "What Snake is That?" by Conant & Bridges. In fact these authorities generally do not favor any cauterization.

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(This matter was taken up with the Public Health Service, and Dr. James A. Dolce, Division of Sanitary Reports & Statistics, sent us the following statement. In his letter he said: "The publication referred to (Miscellaneous Publication No. 21) is quite obsolete and I believe it is the intention of the Division not to reprint it after the present supply is exhausted." The bulletin was, however, recently furnished to the editor of the Service Bulletin by the Subcommittee on Safety Training, Federal Interdepartmental Safety Council, and is dated 1939. We are glad Mr. Lucas cleared up this point for us. - Ed.)

SNAKEBITE

In the United States the three most prevalent poisonous snakes are (1) Rattlesnakes, (2) Cotton-mouth moccasins, and (3) Copperheads. Of these, the larger rattlesnakes inflict the most dangerous bite.

Immediate Surgical Treatment:

Apply a tight bandage above the knee in bites on the lower extremity, above the elbow in bites of the upper extremity. Release the bandage for 3 minutes every 15 minutes and replace slightly higher on the extremity each time. Remove bandage entirely after 8 hours.

The wound of the bite must be enlarged by making two 1 inch incisions at right angles to each other through the fang punctures. The poison should be sucked from the wound by mouth or with a suction apparatus if available. Suction should be applied for 20 minutes out of each hour for 15 hours.

Antivenin Treatment:

Serum available in the United States, known as "Antivenin (Nearctic Crotalidae)" is effective against the poisons of rattlesnake, water moccasin and copperhead if given in adequate amounts within several hours after the bite. Antivenin should be given by a physician if possible. The earlier it is given the better.

Precautions:

1. Get patient to doctor as soon as possible.
2. The patient must avoid all unnecessary exertion.
3. The patient should consume large quantities of water.
4. The patient must not be given alcohol in any form.
5. Potassium permanganate and other strong chemical antiseptics must not be applied to the wound.

MOTOR BIKES BRING GAME OUT OVER MOUNTAIN TRAILS

By J. H. Hatton, Washington

A new and interesting phase of hunting was headlined in the "Denver Post" of October 13, 1940, under "Mechanized Methods Adopted by Deer Hunters in Colorado." "Blitzkrieg" tactics was another name given to it. Two young couples, another young man, and an elderly man were camped on Willow Creek about twelve miles east of Gunnison, Colorado. They had three motorcycles and with them made daily sorties into the hills over some of the roughest trails. The machines were not used to chase deer but to get them quickly into the upper country from where the game was stalked on foot. They were used, however, to transport the kills out of the woods.

Quoting an observer: "It was a pretty successful operation. I was standing beside my tent one day when one of the cycles whisked by me on the trail. Snugly tied on the back and draped around the machine was a big buck. This motorcycle passed me and another appeared. The driver also had a big deer. The adaptability of those machines was what amazed me. They went over rock trails at high speeds."

IN-SERVICE TRAINING FOR STENOGRAPHERS

By Viola C. Davis, Snoqualmie

In answer to Evelyn E. Kiene's article in the Service Bulletin of August 19, 1940, titled "In-Service Training for Stenographers" the Snoqualmie National Forest in Region 6 has this to say:

Mr. M. W. Prasch, our Administrative Assistant, 3 years ago devised for our clerical force a typewritten booklet on Office Management & Organization, which includes in condensed form stenographic regulations in the Manuals and Handbooks, an organization chart, and a brief history of the Snoqualmie Forest and its activities, the names and titles of each staff officer on the Snoqualmie Forest from Supervisor to District Ranger, and the clerical force, stating the particular duties and responsibilities of each. He has also incorporated therein special instructions, such as a pep talk on personal conduct; procedure on routing and mailing correspondence, local and long distance telephone calls; "Ten Essentials" for proper handling of telephone calls, and daily schedule of our messenger service. This booklet is so bound that any new or revised instructions can readily and easily be incorporated. The front is indexed so that the information can be readily located.

In addition to this Mr. Prasch has prepared an ingenious system clarifying the Manual instructions as they apply to procedure, placing these instructions in step-by-step methods on 5" x 8" cards, filed in a black cardboard box labeled "BRAIN BOX - HOW TO DO THINGS." Blue and salmon subguides segregate instructions according to file designations, such as COMMUNICATION (information on telephone calls, telegrams, etc.); PROCUREMENT BIDS (How to prepare bids, step by step); LETTERS OF TRANSMITTAL - Yes, samples of all 20 of them. What stenographer cannot recall the confusion of those first few weeks when such requests as "Prepare an 861, Timber Sale", etc. etc. were given to her by some staff officer. However, with a sample letter of transmittal and brief instructions right in front of her in "The Little Black Box" (as we on the Snoqualmie so affectionately call it) 861's have caused no worry or lost time. These BRAIN BOXES can, of course, be made to fit the use of each Forest as to the activities which are most important.

Perhaps the first thought that comes to your mind as you read the above is "Oh, that is so much work and why duplicate what is already in the Manuals." But I am sure stenographers will agree that if one has a box handy with this same information in front of her, it is a much simpler procedure to turn to it for assistance, than to run to the file room or some other room to search through the Manuals. Yes, it does take a little extra time at first to prepare it all and to make a few revisions, but I am sure Mr. Prasch has been amply repaid by the very few interruptions he has from his clerical force. We old-time stenographers find it invaluable in the simplification of our work, and the new members can think of the many times it has helped them to work out their problems.

AUSTRALIA CLAIMS TREE TITLE

Cape York, Queensland-- Australia claims the world's oldest tree. It is known as "Old Peter," and is found in the tropical forest to the north of this country which abounds in strange things.

The age of the plant has been set down as 15,000 years.

"Old Peter" is a giant macrozama palm growing on the summit of the Tambourine Mountain, in the southeast corner of Queensland. The State which holds it also provides another puzzle for the botanists. It is a group of Antarctic beeches, recently discovered growing on the summit of a peak in the Macpherson Range, one of the highest mountain chains in Queensland.

The Antarctic beeches are held to be remnants of the forest growths of the last Ice Age and they are said to get their name from the fact that Antarctic explorers have found fossils of the trees amidst the blizzard-swept icy wastes of the Far South. Today, it appears, the beeches are found growing in only two regions in the world, Queensland, a place of tropic heat, and Tierra del Fuego, where the climate moves to extreme of cold.

Botanists have long puzzled over the presence of the trees in Queensland, and some hold them relics of times when this country was just emerging from the glacial age. (Christian Science Monitor, October 14)

SPARING THE ROD

By Emma H. Morton, R.6

This is written for the enlightenment of those head-wagging adults who insist that the day of drastic parental discipline has passed. I got the yarn from Ranger A. E. Berry, of the Umpqua.

It seems that ever since the first Forest Officer threw a leg over a horse in the Umpqua "reserve" the chief big game hunting has been for fire bugs. The "kill" has been so negligible that this incident is all the more remarkable. One day last summer a fire was spotted on the South Umpqua District. Ranger Berry, with a small crew, got it under control so quickly that he had an opportunity to look for clews almost immediately. He found several burned and unburned matches at the lower edge of the fire. In an unoccupied house nearby, more matches of the same kind were found, so it seemed fairly evident to him that the fire had been set by small children playing with matches - but what children?

Berry hastily interviewed three small boys - the only children in the immediate vicinity, but they all assured him they never played with matches; had not been at the scene of the fire; and under no circumstances would they set fire to the woods. He went away feeling sure he had talked with the culprits but saw no possibility of proving their guilt.

About two o'clock that night, Berry was aroused from his slumbers by loud knocking. Upon opening the door, he was amazed to find the three boys (aged 7, 8 and 9 years) accompanied by humiliated and wrathful sires, who stated the boys had confessed setting the fires. They deserved severe punishment, the fathers told the Ranger, and he was to administer it. Their idea of an adequate penalty was to lock the culprits up for a day and night and then "kick them out and make them walk home." "Home" was a distance of 12 miles through the forest.

By that time, Ranger Berry had rubbed some of the sleep from his eyes, and recovered slightly from his astonishment. Even then, it took more than an hour to convince the irate fathers that the Forest Service does not maintain jails at ranger stations. It was after 3:00 a. m. when the strange delegation took its departure.

FEEDING THE PUERTO RICAN ENROLLEE

By F. R. Yates, Caribbean

Where it's "chow" in the States, in Puerto Rico it's "Rice and Beans." For as far back as old-timbers are able to remember, the food of the masses on this Island has consisted principally of rice, beans, peas, fresh and salted fish, potatoes, bananas, plantains, breadfruit, dasheens, yams, and other vegetables, with meat thrown in very frequently, as is evidenced by the fact that the most widely known of Puerto Rican dishes are the "Lechon Asado" (Roast Pig), the "Arroz con pollo" (Chicken with Rice), the "Asopao" (chicken with rice but very moist), the "Salcocho" (a soupy stew of meats and vegetables), the "Mondongo" (a dish prepared with beef and tripe, referred to in Puerto Rican slang as "Fuerza"), the "Mofongo" (Pork cracknels ground and mixed with mashed fried green plantains), the "Gandinga" (beef or pork liver, heart and kidneys combined with potatoes into a rich stew), the "Bacalao Guisado" (smoked codfish boiled with vegetables), and many other meat combinations. In addition, a variety of fresh tropical fruits, such as bananas, grapefruit, mangoes, oranges, papaya, pineapple, and many others, can be secured throughout the Island in all seasons of the year.

All of this sounds like a real variety, representative of good nourishment for the entire Island population, but such is not the case. Preference for rice and beans and necessity for purchase of the cheaper foods have resulted in a general undernourished condition in the lower classes, from which group the U. S. Forest Service secures its enrollee material.

Feeding a large group of men involves the conservation of health and the maintenance of bodily strength, as well as general well-being and contentment. These problems demand, in our organization, the closest cooperation between the Medical, Educational and Mess Division of the Supervisor's office.

Daily cost reports for fiscal year 1940 for all camps on the Forest, inclusive of overhead and transportation, show an expenditure of $145,105. This amount of money served 1,261,857 meals, at an average cost of 11.49 cents per meal. This is a little over one cent per meal cheaper than the meals the Civilian Conservation Corps Enrollees in the States were fed during the first ten months of the same fiscal year.

Favorable prices of fresh fruits and vegetables on the Island were responsible for this low cost? No, senor. It is true that such low prices did affect the cost, but remember that fresh fruits and vegetables make up only approximately one seventh of our total menu cost and practically all our staples come from the States, with added transportation costs. An actual comparison of prices of food in Puerto Rico with prices of the same food in the States shows a higher cost of living on this Island. However, let us emphasize that we are not shooting at a low cost per meal. Actually, we could stick to rice and beans, which would please the majority of our enrollees, and drop the bottom out of the above-mentioned cost, but our objectives prevent such action. To illustrate, at the beginning of the fiscal year 1940 we were feeding at the rate of 32 cents per day, but due to additions to our approved food list we intentionally raised the cost to 34.49 and may, at some future date, increase it still further if it appears to be necessary in the accomplishment of our mess management objectives.

Well, all of this has whipped up my appetite, so excuse me while I go out to pick a banana.

PRAISE FROM UNITED AIR LINES

By C. J. Conover, Snoqualmie

Recently, we wrote to the United Air Lines at Seattle, telling them how much we appreciated the cooperation extended by their pilots during the past season in reporting the location of fires on the Snoqualmie. W. C. Abies, station manager at Boeing Field, acknowledged our letter as follows:

"It has always been a pleasure for United Air Lines to cooperate with your forest people and for more reasons than you might suspect. First, we are very much interested in our forests because we are flying over them and see them a lot more than other people. We also have a high regard for the men in the Forest Service. At times during our short career we have had some accidents and your men have always jumped into the breach and given us a very valuable hand.

"If you have the opportunity we would like to have you express our admiration for all of your personnel and we, in turn, would like you to feel free to call on us if we can be of any service to you in your work."

THE EDITOR DISCOVERS

Several years ago the State of Mississippi desiring to develop a suitable area for National Guard encampment secured the passage by Congress of an Act authorizing the sale to the State of something over 20,000 acres of land south of Hattiesburg and within the De Soto National Forest which previously had been acquired under the Weeks Law. This sale was made, the Weeks Law appropriations being reimbursed the amount the United States had paid for the land.

This area, known as Camp Shelby, the State has now turned over to the Federal Government. Since it proved inadequate to the Army's needs, bills were introduced by Senator Bilbo and Representative Colmer authorizing and directing the Secretary of Agriculture to transfer to the Secretary of War for purposes of national defense adjoining lands in the De Soto National Forest not exceeding a maximum of 65,000 acres. This bill (S. 4119) was approved by the President on July 19, 1940.

Formal request for the transfer of these lands has now been received from the Secretary of War and the order of transfer, for signature by the Secretary of Agriculture, is now in course of preparation and probably will be signed within a few days.

Thus the De Soto National Forest already has made two material contributions to national defense, in addition to its larger contributions to national preparedness through revival of its timber productive capacity and its already noteworthy transition from a general condition of depletion or denudation to one of widespread regeneration. Thus far at least it has not made the major sacrifice that was made by the Choctawhatchee, the complete surrender of which constituted "The last full measure of devotion." The requirements of national defense are not yet at an end, and just how much more the De Soto must give up is still a matter of uncertainty.

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National Forest receipts for the period July 1, 1940, to September 30, 1940, were as follows:

Region	Timber	Grazing	Other	Total	Change from last year
1	$ 225,311.42	$ 6,033.26	$ 3,406.24	$ 234,750.92	Increase, $48,756.28
2	92,680.74	19,011.57	2,782.65	114,474.96	Decrease, 18,542.85
3	96.969.92	14,403.40	1,427.82	112,801.14	Increase, 41,334.40
4	49,968.96	41.160.59	1,532.55	92,662.10	Decrease, 1,042.48
5	124,402.12	34,971.59	7,065.23	166,438.94	Increase, 45,347.32
6	511,713.10	12,064.75	1,974.27	525,752.12	Increase, 159,570.00
7	35,780.08	114.56	2,306.72	38,201.36	Increase, 11,300.46
8	214,685.53	598.95	5,273.08	220.557.56	Increase, 32,212.48
9	63,816.66	465.80	2,424.81	66,707.27	Increase, 37,218.87
10	12,386.34	-	901.08	13,287.42	Increase, 2,989.82
Total	$1,427,714.87	$128,824.47	$29,094.45	$1,585,633.79	
Total same period last year	$1,073,814.63	$126,177.09	$26,497.77	$1,226,489.49	
Increase	$ 353,900.24	$ 2,647.38	$ 2,596.68	$ 359,144.30	

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"Job Descriptions for the Lumber and Lumber Products Industries, including Sawmill, Planing Mill, Excelsior, and General Woodworking Jobs" prepared by the United States Employment Service, Department of Labor, has been published by the Government Printing Office. The job descriptions are based on information gathered by trained field analysts from actual observation of typical jobs. They are arranged in the following ten groups:

Sawmill Jobs, Grading and Seasoning Jobs, Lumber Moving Jobs, Planning and Regulating Jobs, Craft Jobs, Woodworking Machine Jobs, Assembling and Finishing Jobs, Machine Operator Helpers, Maintenance Jobs, and Laboring Jobs.

Each of these job groups is presented as a unit following a short, individual introductory section devoted to employment information concerning the group.

The descriptions include the following information: Job Summary, Equipment, Working Conditions, Relation to Other Jobs, Specialized Qualifications, and Special Information.

The volume also includes a chapter describing the nature of the work involved in the industries, a bibliography, and a glossary. It contains about 350 pages, is illustrated, bound in cardboard cover, and sells for $1.25 at the Government Printing Office.

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Three organizations which have close working relationships with each other received commendatory mention in the October issue of "Harper's" Magazine. Mr. Bernard De Voto in "Road Test" states: "Ever since my boyhood I have thought of the Forest Service as the most admirable of government bureaus, with the Park Service only just behind it, if at all. Clearly the Bureau of Public Roads and the State highway commissions are now their peers."

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About 18 months ago, a boy was caught setting fire on Federal forest land in Missouri. The Judge sentenced him to go to Sunday School every Sunday for 2 months. This former fire-setter, Region 9 reports, is now a CCC enrollee serving as a fire lookout, and he is said to be a good one.

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"Mount Hood: A Guide" is the title of a recent book compiled by Workers of the Writers' Program of the Works Projects Administration in the State of Oregon. It is one of the "American Guide Series" published by Duell, Sloan and Pearce, 270 Madison Avenue, New York City.

Part I, entitled "Mount Hood's Background," describes the Natural Setting, How Mount Hood Was Made, Flora and Fauna, History, and Mount Hood National Forest.

Part II contains information on Motor Tours, Hiking and Riding Trails, Ascent of the Peak, and Winter Sports and Ski Trails.

The book is attractively illustrated with full page photographs printed in sepia tone by the offset process. Many of the pictures are from the Forest Service collection.

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The following item appeared in a recent issue of the "Boston Globe":

"A program that is liable to have far-reaching effects is being sponsored by the American Legion Auxiliary. More than 50,000 young girls up to 18 years of age will be enrolled in an organization to be known as the Junior Squirrel Club. The movement is designed to develop a conservation consciousness in the nation's youth and to instill in them a full appeciation of both National and State Forests. Mrs. Harry I. Smith of Kansas City, National Chairman of the American Legion Auxiliary, is in charge of the program."

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The following retired from the Service during the month of October:

Fred J. Dooley, Modoc Forest; Fred Graham, Wyoming Forest; James P. McCormick, Forest Products Laboratory; Marshall G. Ramsey, Beaverhead Forest; Roy H. Rice, Coconino Forest; J. M. Witherow, Washington Office.

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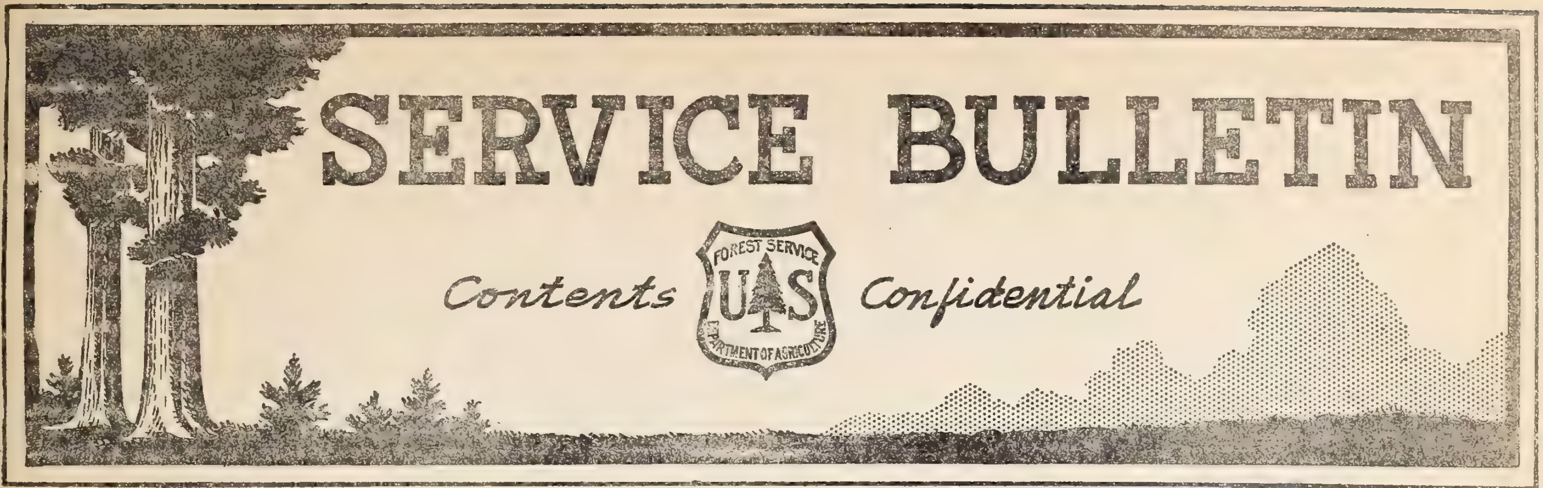
W. Leslie Robinette, Junior Range Examiner on the Fishlake National Forest, was awarded third prize in the National Federation of Federal Employees' October photo contest with a picture of a three-day old fawn.


SERVICE BULLETIN

Contents Confidential

Vol. XXIV, No. 24 Washington, D. C. November 25, 1940

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THE ZOMBI FORESTER

By F. V. Horton, R. 6

Once upon a time there was a nice young chap who graduated in forestry from good old Siwash, passed the J.F., and got himself a job in the Forest Service. Along came the CCC, the ERA, the XYZ, and before the ink was dry on his diploma he was a full-fledged District Ranger in charge of the Tall Timber Ranger District on the Skyhigh National Forest. Now this nice chap had a lot of brains. He read the manuals far into the night. He was up bright and early each morning and into his natty uniform, smelling of Lifebuoy, Listerine, and Pepsodent. He knew all the answers about sub-caliber ranger work, safety programs, work analysis, hour control, fire control, and self control. He knew his nira, devnira, impnira, and hynira; his nuera, triera, quadera, quinera, and was rated especially high in some of them. He had special qualifications, in WPA, PWA, NRA, AAA, FSA, and early learned that CCC had no pharmaceutical implications.

He could spin the wheels of a fire danger board and tell you who went to where and when. He knew all the formulae.

You might gather from the above that this nice young chap was some Forest Officer. As a matter of fact he was a cold dismal flop. He was worse than a flop. He was a zombi forester. The place where his soul should have been was full of bureaucratic hashish.

He had a lot of people to deal with. Stump ranchers, stockmen, recreationists, special users, farmers, hikers, hunters, etc., but to him they were not people. They were just cases in the file. If you mentioned John L. Jones to him his mind's eye saw a manila folder neatly tagged "L, Uses, Skyhigh, Jones, John L., Residence, 1/1/38." It never occurred to him that John L. Jones lived and breathed, had a nice family, loved, hated, suffered, or had any of the other human reactions. It never occurred to him that some slight variation in the enforcement of regulatory formulae might very possibly affect the happiness and well-being of John Jones' entire family. To the bureaucratic zombi Jones was just one more case to be crammed into the regulatory mold, just another factor in a formula. Sure, this nice young chap knew what was good for Jones, and Jones could conform to the formula, or else. If you asked this nice young chap why he did thus and so, he very proudly referred you to Regulation U-something on page G-6a of the Special Use section of the National Forest Manual. To him the Manual was the alpha and omega beyond which no man need go.

Probably this nice young chap thought he was pretty smart. He kept the regulations to the letter. His boss couldn't catch him in any departures from the standards. As a matter of fact, this nice young chap was dumb. He took the easy way. He substituted standards for brains and formulae for thinking. No wonder he became a zombi forester. He didn't need a soul any more, because after all he had the manuals.

And so the Forest Service fell into disrepute around the Tall Timber Ranger District of the Skyhigh National Forest. People, taxpayers you know, users of the common property, didn't like the Forest Service, and so they just let the control of the Tall Timber Ranger District go into other hands, and now this nice young chap is wandering up and down the world shouting, "There ain't no justice."

(Note: The places and characters in the above are entirely fictitious and any similarity between them and actual people or places is entirely coincidental.)

AS ANOTHER OLD-TIMER SEES RANGER TRAINING

By George D. Russell, R. 3

The various articles in the Service Bulletin about Ranger training and about Ranger transfers (especially Jesse Bushnell's article in the issue of July 22, 1940) set my thoughts roving on a recent week end, over changes I have seen, transfers I have known, and Rangers I have met in my many years as a Ranger.

The merits and disadvantages of transfers have been well brought out. A hard-headed Ranger years ago could stay contentedly on one district till moss grew on his back, and never realize the Service was growing away from him. The Service heads have realized this. Work of the Service has changed more rapidly than husky outdoor men die off. Timber management has advanced so that a common logger can no longer fill a Ranger's job; range management is no longer a matter of knowing the number and ownership of stock on an unfenced Ranger district. The college boy can handle the job without being able to ear-down a bronc or out-cuss a rancher.

However, it is still necessary for recruits to have certain experience. Further, Rangers with the same educational qualifications and same length of experience vary greatly in ability to get the job done. Conditions, kinds of work, and the class of users on districts vary greatly.

Although the annual Ranger training school is perhaps the best method yet devised, it does not bring the Ranger district to the school. Inspections and discussion of problems by the Forest Supervisor or his staff do not meet all the Ranger's needs.

There is something individual in the way each Ranger does his work. It might be called his technique. The only way it can be imparted to another is for the Ranger who needs help to ride and work with the successful Ranger and just stand by and watch and listen. The trainee may ask questions later if he cares to, but it would be better for him to keep mum and simply observe the other's approach, discussion, and conclusion in dealing with a user. This allows the technique of the trainer to unfold and the reaction of the user to be observed. Most questions which might arise in the trainee's mind will have been answered by the time the business with the user is concluded.

The trainee is getting both sides of the question, which is instructive and interesting beyond any other method. Likely, he will think ahead of the game and anticipate the play by each participant; he can plan his own comeback as though he were either participant. Or if he can't forecast the play, he will be alert for the outcome. In a few days he may find himself comparing his plays with the trainer's and also getting the viewpoint of the user. If the trainee has missed some of the plays he will see how, and profit accordingly. If he has done well, his confidence will rise. If he is good in psychology, as most college men are, he may even decide he is a better Ranger than the trainer, but he will keep it to himself until he can demonstrate by results on his own district.

Most needed by streamlined recruits is training that will help them "savvy" the little details which the experienced Ranger knows, about getting along with the sawmill men, stockmen, recreationists, the local fire organization, the Forest staff and R. O. men. What is needed is a tactful but definite presentation of Service traditions, each fellow helping the other, not shoving his head under; yet every fellow being competent to handle his own job capably without being prodded.

For example: A young Ranger taking his first district bought a horse which quickly unseated him. I tried it for him and found he had bought a "locoed" horse. He had had no experience with horses.

Another instance: A young Ranger at whose station I spent a week end seemed strange toward me. I concluded he didn't know whether he should call at the visiting officer's quarters and invite me to meals, or I should come to his residence and order meals when I was ready. He knew the theoretical work but was probably "green" about local customs.

It is pitiful to entrust such promising young fellows to the mercies of cowpunchers and lumberjacks, without guidance from our experienced men. It's the Service falling down, not the young fellows!

One or two good Rangers-at-large in each Region to go to a Ranger District for a month or two when a new man is assigned there would help many a young Ranger. Such a man could tell the young Ranger with the "locoed" horse how to cure it and handle horses in his work. By tactful example and conversation the "green" man could be guided on the customs of and working ways of stockmen; he could be taught that even though he lives in a Service-owned house he should be a courteous host, and yet not have to run a restaurant.

Some readers may say, "We have just such a training method; we assign new men as Assistant Rangers." But that method does not train the new man on the district he will later take charge of, and the environment is quite different. A second objection is that, too often, Assistant Rangers are considered as help to get jobs done in a heavy district. They are sent out to do jobs alone, then reported as "dumb Doras" if they fail to make good.

It would be better to train them first on the district they will hold, and put them on their own resourcefulness there. This method would weed out the incompetents during the probation period, or produce a Ranger with a grasp of his job's intricacies -- a Ranger who has lost his uncertainty and found the calm of assurance.

The added expense of a few Rangers-at-large would look small beside the gain in efficiency of personnel.

BAKED APPLE CLUB

(From a talk by John H. Hatton, Assistant Chief, Division of Wildlife Management, Washington, D. C., at the Baked Apple Club meeting at Gifford Pinchot's home May 2, 1940)

This occasion calls up memories of long ago. Needless to say I am happy and honored to have the privilege of attending another baked apple club meeting. Incidentally, I recommended many years ago that Baked Apples and Real Cream and Delicious Gingerbread to which we were treated here in those early years, and when some of us didn't fare so well during the rest of the week, be voted a standard Forest Service dessert. I can taste those early Thursday evening discussions even yet.

I came into the Forest Service on July 1, 1901, right out of college and from a South Dakota farm. So from the standpoint of consecutive length of official service under one employer, if not from the standpoint of brilliant or sensational achievement, I'll challenge any one in this company to push me off a front seat.

Herbert Smith said to me: could I tell a little about the early Division of Forest Extension, the tree planting division, under Mr. Wm. L. Hall, in which division my first assignment in the Service placed me.

Among forestry interests I have always given tree planting first rank. It is creative and constructive forestry. I hope you will pardon as I go along a little autobiography. I use it simply because it ties more or less into the history of forest extension in this country and to my early forestry associates.

It would be nice if I could tell you that forest extension has been my special interest since I first drew breath, or from my earliest memories, but I can't. I ran the YMCA three of my four college years and I have never been able to get completely away from the influence such an organization has on one's veracity. I can only go back to when I was ten years old when Father loaded Mother and a baby and five other small children into a lumber wagon, and with the big farm team drove to the tree claim. He had told us we were going to celebrate Arbor Day and have a grand picnic. We had gotten up especially early in anticipation of a clothes basket full of lunch Mother had prepared and five of us sat in the bottom of the wagon box encircling and protecting that basket.

Well! The family planted five acres to trees on the tree claim that day. We never got quite over our sore muscles and injured feelings. So I can hardly say, truthfully, that our first observance of Arbor Day turned my feet definitely toward forestry. We spent much time in subsequent years, however, nursing and cultivating and replanting the fifteen acres Father had set apart for trees on the 160-acre tree claim. The law required 10 acres. He made it 15, so I'm sure those years had something to do with my electing the forestry profession.

Father was a natural tree planter. He left monuments in trees wherever he settled and the conditions permitted. So there may be something in heredity after all.

I saw the old tree claim again in April 1935. It had been sold many years before to another farmer and he had damaged it by making a pasture of it. The severe drought of the early 30's had also taken a heavy toll. But it was still the most conspicuous thing on the local landscape. Some of the trees, towering high, were ones we planted as children on that Arbor Day.

After all and even with that practical tree planting instruction and background, my entry into the Forest Service was as much accidental as premeditated. Hard times on the Dakota farm and ranch drove me first into country school teaching and teaching showed me I was seriously lacking in education myself. I decided to work my way through college; and strange as it may seem, prepare myself for a medical career, or failing in that, and equipped with training in scientific agriculture and kindred subjects, I'd go back to the farm and ranch and apply that training. I had learned well its practical phases from early boyhood.

But during my sophomore year Harold B. Kempton, long since deceased, in the Division of Forest Extension under Mr. Hall, was making a study of planted groves in South Dakota and other Middle West States and took the occasion to look over some plantations on the college grounds. I was not there just at the time of his visit but he talked with my roommate and tried to persuade him to apply for a position in the Division of Forestry. But B. M. Hart, my roommate, was preparing for a medical career which he has been following now for many years. He told me about Kempton's visit. As I have told you I had acquired a practical interest in plains tree planting problems since the old tree claim days, and I began to think of the matter with favor.

That was in the fall of 1898. That same fall the late George L. Clothier, another of Mr. Hall's assistants, was travelling through the Plains States making tree-planting plans for farmers. He came to our college and asked for the privilege of joining some of the professors on their usual winter institute tours among the farming communities. The faculty did not seem, at first, to wish to give him a place on the course of instruction, but finally decided to try him out one evening at a special meeting to which I was invited. He gave an illustrated talk on his work and made a favorable impression. He got on the force of travelling institute instructors.

It was my first acquaintance with Mr. Clothier. He saw I was interested in what he was doing and invited me over to his hotel room so he could tell me more about it. We went into it all thoroughly and he told me he didn't see why I was not well enough equipped then to perform the work as well as he was doing it himself. He advised me to apply for a position. I decided I would, and go into the work, if possible, at the close of my college course two years later. As I was leaving he showed me his appointment, which was to the position of Forest Agent at $1000 per annum. I hadn't asked him about salary. That thousand dollars, however, seemed to me a princely salary then, since most of our under professors, after taking post-graduate work and spending 7 to 10 years in preparation, started out on salaries of from $600 to $720 per year and married on it, taking their places, as well, in good society.

Having made up my mind I sought how best to specialize on subjects that would fit me best for my anticipated position. I'll not say how much that salary prospect had to do with turning my feet or keeping them turned toward forestry, but I was going to show those under professors something when I graduated.

For the remaining two years and until graduation I equipped myself under Professor N. E. Kansen as much as it was possible to do in an institution of that kind. He prepared for me a very thorough reading course outside of my regular studies. At the same time I pursued my agricultural and kindred studies which would be helpful should it, for any reason, become necessary to return to the farm and ranch.

A few days before graduation I received notice of my forestry appointment on July 1, 1901, to the position of "Student Assistant" at a salary of $300 per year -- $25 per month. I'll not elaborate on my disappointment, nor chagrin. I had put my hand to the plow and there was no turning back. It had all been planned for two years and there was nothing else I wanted to lay my hand to. Neither my people nor my friends knew what my position was. They thought, being a "Government job" it must be something splendid and, with reference to the remuneration, my pride prevented conversation about it. I don't know how long it took them to find out, if they ever did. I think though that a certain young lady must have looked up my name in the book of Government employees. Anyway there was another reverse chapter in the life of a would-be forester.

(To be continued)

THE MISSISSIPPI DELTA LAND SETTLEMENT PROBLEM

(From a Report of the Interbureau Coordinating Committee's
Sub-Committee on the Problem)

A new "land rush," a movement of major national significance, is under way in the vast cut-over area of the Mississippi Delta, in the States of Mississippi, Louisiana, Arkansas, and Missouri. Thousands of settlers are streaming in each year, and clearing the land for agriculture. Millions of acres, much of it very fertile, are still waiting for settlement, however, and it is probable that present settlement is but the forerunner of a greater tide of migration and settlement yet to come.

The Delta settlement area is a new frontier of the first rank. In land that apparently will be developed for agricultural use, this area includes more than three times the acreage which will be brought under irrigation by the Grand Coulee Reservoir in the Columbia River Basin, and, in fact, includes considerably more acreage than has been irrigated in all Federal irrigation projects to date. It is noteworthy that the per acre cost of developing Delta land into farms probably will be somewhat less than the comparable cost at Grand Coulee.

The agricultural promise offered by the Delta area would be difficult to exaggerate. This area lies in close proximity to areas as over-populated and poverty-stricken as any in the United States. Many of the families in these over-populated areas are struggling to obtain a miserable living on land unsuitable for agriculture, whereas the Delta offers new farm land which is capable of supporting them at a much higher level of living. A wise development policy would permit the establishment of many productive farms in the Delta, while at the same time permitting the retirement from cultivation of other large areas that are unsuitable for intensive use....

In the settlement area as a whole, most of the people who are trying to carve farms out of cut-over land are doing so as a last resort, in a desperate attempt to obtain a measure of economic security. Some of the settlers are former sharecroppers and laborers on cotton plantations. Some are people who were driven from other farms when flood control dams put their land under water. Some are farmers who have been "tractored off" other farms. Some are rural workers who were thrown out of work by the decline of forest industries. Some came from urban communities during the depression. Many are people who have left behind the worn-out land in nearby hill sections to seek better opportunities in the lowlands.

As a rule, the settlers have little or no financial resources of their own, and their workstock and tools are inadequate. Adding to their difficulties, the credit facilities available to them are grossly insufficient. Because of these conditions, settlers are forced to accept nearly any type of land purchase contract or credit arrangement that is offered to them

The difficulties, losses and wide-scale suffering of the settlers are becoming more and more serious. Lack of equipment and credit, inequitable terms of purchase, misguided choice of locations, and lack of knowledge about lowland farming are some of the problems with which they must wrestle. Housing and health problems are acute. The economic and social problems facing these people are many, and they are too big for the settlers to solve without help....

The production of cotton on the new land being developed creates a whole nest of problems. The settlers generally depend upon cotton as their main source of cash, partly because the land is adapted to cotton, and partly because they were cotton farmers before moving onto the new land and are accustomed to growing cotton. Consequently, settlers plant cotton as soon as they can. In many cases they kill the trees, clean out the underbrush, and plant cotton even before the trees are cut down....

Forestry should be considered as one alternative opportunity. About 42 percent of the Delta is still in forest. The area produces the bulk of the finest hardwood timber cut in this country. Doubtless much of the poorer land in the Delta should remain in forest. Other opportunities that should be explored include livestock raising and crops not heretofore commercialized on a large scale in the Delta. Possibilities for the development of processing and manufacturing industries to supplement and balance agricultural activities should also be studied.

While recognizing the need for emphasis upon diversification in the Delta, the possibilities of encouraging a shift in cotton production from old, worn-out areas to newly developed family-sized farms in the Delta should be thoroughly explored....

Additional settlers in the Delta will face problems similar to those of settlers who are already there, unless guidance and supervision can be provided by the Department of Agriculture, or by some other public agency. There are two major needs: (1) the amelioration insofar as possible of unfavorable conditions under which present settlers are living, so that those already in the area will be helped to a sounder footing; and (2) the guidance of future settlers who are sure to go into the Delta over a period of years, whether guided or not.....

The issue before the Department at this time is whether or not it is willing to assume the initiative in creating better settlement opportunities for present and prospective settlers in the Delta. Two courses are open. A decision must be made between them.

The first course is to treat the settlement problem as one justifying no unusual concern or action by the Department; that is, for the Department to continue to give such assistance as is possible through effective utilization of present funds under existing authorities. This course is not providing the help that is needed by present and future settlers. By permitting indiscriminate settlement to proceed, and the present exploitation of settlers to continue there would simply be an increase in the number of problems which would have to be dealt with later, and in the amount of assistance which later would have to be given.

The second course is for the Department, recognizing the truly national importance of the Delta settlement problem, to undertake broadscale creative action to deal with it. To do this, new legal authorities, as well as additional funds, will be required. The second course is the one strongly recommended by the committee.

THE CCC AND NATIONAL DEFENSE

(From an address by W. Frank Persons, Special Assistant to James J. McEntee, Director of the CCC, before the CCC Selection Meeting of the Ohio Welfare Conference, Columbus, Ohio, October 17, 1940.)

Obviously the first need in a program of national preparedness is to have strong, healthy, alert citizens. The Civilian Conservation Corps has been aiding young men to build up their strength and vigor for seven and a half years. There are already two and a half million young men who are stronger and healthier and more immune from disease as a result of their CCC experience. Personally, I should list this as the CCC's Contribution Number One to our program of national security. Each year, henceforth, at least another quarter million young men will go through the rigors of camp life and through their first school of hard work.

The second major contribution which the Corps can make toward national preparedness is the maximum development of young men trained in the constructive arts of building and operating and repairing. Ability to construct bridges, build roads, put up telephone lines, the basic skills of which are being acquired every day by thousands of young men in CCC camps, are as vital to national defense needs as the more spectacular techniques of front-line troops.

CCC camps, by their very nature, provide many natural training opportunities which fit without basic change into a program of national defense. The Civilian Conservation Corps has 43,000 units of automotive equipment. This is the largest fleet of motorized equipment in the United States. There are trucks, ambulances, tractors, bulldozers, drag-lines, and so on. Forty-three thousand men at a time is the minimum number of operators necessary to run this equipment. But in times like these, through a careful program, twice or three times this number of men will be trained in the operation of these machines. As just one of its contributions, the CCC will turn out more than a hundred thousand truck and tractor and ambulance drivers each year.

Obviously, too, the CCC must train young men to maintain and repair these 43,000 automotive units. Here again the CCC provides an ideal training ground for youths who wish to become maintenance and repair men. In its system of central repair shops, of which there will be 63 in operation very shortly, the Corps will develop capable motor mechanics. The youths who work in these central shops will spend all their time as motor mechanics. They will learn to perform the most complex overhauling and repair jobs on automobiles, and on the heavy equipment, such as trucks and tractors and bulldozers....

There are many other types of CCC jobs which provide training of equal importance in our present national defense effort. The Corps provides training in telephoneline construction, bridge construction, road construction, radio and signal communications, first aid, and many other skills of defense value. Not least of all is cooking. Despite tank warfare, an Army still travels on its stomach. The CCC has always had more than 5,000 cooks in training at a time. Henceforth, the Corps will train many more and even better cooks....

Neither of these two efforts will necessitate reorganizing, or redirecting the program of the Civilian Conservation Corps. Both of them require that we shall redouble our energy and step up our production. We have been moving in the right direction all along - now we must move faster....

If the Nation is to gain the greatest good from the Civilian Conservation Corps, it is important that youths who are selected for enrollment should have the capacity and willingness to participate fully in all phases of the CCC program. These things we must bear in mind when selecting young men.....

I know of no organization in the country which enlists the cooperation of more different agencies and groups than the Civilian Conservation Corps. The success of the Corps has depended entirely upon the ability of all the different individuals in the Departments of War, Interior and Agriculture, the Office of Education, and the 48 State Departments of Public Welfare to work under the leadership and direction of the Director of the CCC toward the common purpose of conserving and developing our most valuable national asset -- the young men of this Nation.

DO WE HAVE TOO MANY EGGS IN ONE BASKET?

By R. K. LeBarron, Lake States Forest Experiment Station

The recent catastrophes which struck experimental forests -- the fire and flood which damaged the San Dimas in California, and the hurricane that wrought such havoc at Gale River, Bartlett, Keene, Fox, and Harvard Forests in New England, and more recently the storm on the Chippewa in the Lake States -- illustrate a type of risk inherent in the policy of concentrating research on small areas. The danger is, in fact, so great that the question may be asked: Does the policy of experimental forests need rethinking?

I had the experience of witnessing a toronado that wrecked the Kawishiwi Experimental Area on the Superior Forest in 1932. Fortunately, no great amount of experimental cuttings had been established prior to this storm. Since then we have, with the aid of miscellaneous projects, attempted to clean up and restore the Kawishiwi, but it has been a tedious and thankless task.

It is possible that we might lose, in the long run, more plots from destructive agencies if the experiments were scattered widely, than if they were concentrated on a few experimental forests, but the effects are different. The loss of an occasional plot, here and there, does not upset projects or financial arrangements, but when a whole experimental forest goes, it may suddenly wipe out the results of years of the most painstaking effort.

Furthermore, we have an obligation to restore damaged experimental forests, but when scattered plots are destroyed, we can gracefully withdraw and select new locations.

These observations raise, in an acute manner, the whole question of conducting forest research on limited areas or scattering the plots widely in a more representative fashion. Perhaps it is time to reconsider the policy. Certainly we are in a better position now to do this than we were 10 years ago when most of the experimental forests were founded.

Admittedly, experimental forests have some weaknesses, such as the danger of major losses, which has just been described. They are not entirely representative because they are few and far between. Furthermore, they have tended to divert our time, thought, and financial resources to the development and care of physical improvements like houses, landscaping, and fences.

However, experimental forests have had the effect of making research more realistic because they put research workers into the forest, squarely up against local specific problems. Although not fully representative of all forest types and conditions, research conducted upon experimental forests can and has been used in the development of principles applicable far beyond their boundaries.

Experimental forests have been called "windows into the future", and as such they serve as a guide and inspiration to forest managers. They make possible inexpensive but well rounded and instructive show-me trips for both laymen and foresters.

It seems evident that experimental forests are a success from the standpoint of increasing the effectiveness of research but, on the other hand, the burden of maintaining physical improvements, costing much in time and money, is a real problem which should not be ignored. For all these reasons, it appears that the time is ripe for a reconsideration of the whole policy of experimental forests. This is presented in the hope that it will elicit reactions from others.

DANVILLE COMMUNITY FOREST RECORDS

Story VI - Monuments from a Community Forest

By Ernest O. Buhler, Washington

The Revolutionary War did not only influence the credit of the central Government, but it changed the management of the Danville Community Forest, affected the finances of their minister, the Reverend Mr. Page and his little flock.

On September 30, 1779, eight citizens signed a petition stating:

"Whereas our currency has so youniversally Depreciated which Renders the yearly Salary of our Reverend Minister Insufficient for the Support of himself and family therefor we desire and forthwith Call a Meeting to See if the Parish will Make an addition to the Reverend Mr. John Page's salary for the present year."

A committee was appointed to discuss with the Reverend John Page the matter of salary and he answered as follows: "Being Desired by a Committee of the Parish of Danville to say upon what terms I would settle with Said Parish for the Last and Present year--considering the Difficulties of the times--I offer to take Forty Double in Continental Bills Provided it be paid by March Next--or two hundred and thirty-five hard Dollars and two-thirds of a Dollar Provided they are Paid while the Exchange is 75 for one - John Page, Danville, Dec. 15, 1780."

The inhabitants then voted to comply with the above proposal and they voted a tax on the inhabitants taxable by law to the Minister's Salary and on the lands to the value of Seventeen Thousand Seven Hundred and Sixty Dollars of the Continental currency to defray the charges of the Reverend Mr. John Page, according to the foregoing proposal.

They also voted to see what method the Parish would take to procure 25 cords of woods for the Reverend Page.

The value of the parsonage lands is rather striking at this time. If the needs of Mr. Page for fuel and food had not been met by the parsonage lands, the problem of supporting Mr. Page would have been more difficult. But, even though a dollar did not perform its usual service any more, the products from the land did. A cord of wood still gave the same amount of heat and the same number of potatoes still filled a hungry stomach.

Shortly after December, 1781, a new demand was made on the community. Up to now they had complied with all requests for soldiers' bounties and extra pay for the soldiers. They had drained themselves with paying extra taxes until there was not much more left to pay with. Many of them had sold off their surplus livestock in order to meet the payment of new taxes. The sons who had gone forth to fight the English knew what sacrifices the folks back home were making to support them in the field and some of them no doubt felt that they had better win the fight rather than come home defeated.

But this new demand seemed too much. The warrant asked the inhabitants to meet "To see if the parish will vote to raise money to purchase our quota of beef for the use of the Continental Army." This new request was one straw too many for a population that had sold off most of its livestock to pay the extra tax levies to keep the soldiers in the army. To furnish the necessary beef meant probably the killing of the remaining work oxen that were badly needed. A heated discussion was held in the meeting house without conclusion. It was adjourned into the house of the widow Sanborne. After more discussions, a vote was finally taken and it passed in the negative. This is the only time of record that a demand for the prosecution of the war passed into the negative. They were willing to furnish their time, their money, their credit and their lives, but when it came to beef, they rebelled.

The last entry about enlisting men for the Continental Army from the little Danville settlement occurs on the 13th of March, 1782. At the same meeting appears the announcement of the death of the Reverend Mr. John Page. He had come to the community in 1763 as a young man, single and just out of Harvard. Danville was his first and only parish.

A family had taken sick with the smallpox. The pastor left his own family to nurse the sick ones. He contracted smallpox and died in line of duty. His wife, standing at a chamber window of the parsonage, saw him taken by moonlight on a sled over the snow to his last resting place.

Succeeding generations did not forget him. In 1846, or 64 years after his death, they purchased from the parsonage funds which had accumulated from the receipts of the Community Forest two gravestones at a cost of $71.65 for Mr. Page and his wife.

Thus, it has come to pass that the parsonage lands, when the parson was living, furnished him with fuel, food and shelter and at his death, they were his final resting place.

But, unlike the days of man, which are like grass, the life of the land goes on forever. Hence, even though the parson's life was over, that of his lands kept on. It continued to give to the community the product of its soil and its record of contributions for the next 100 years is impressive indeed.

EFFICIENCY ENGINEER ON MANISTEE WORKS ON 4-STEP METHOD

"The Manistee Forest has found a 3-step substitute for the well-known 4-step method of training, according to one field-going Regional Office man. It may not be so effective at training, but it does get the work done. The steps are:

(1) Explain how the work is to be done.
(2) Show how the work is to be done.
(3) Do it yourself."

(From Region 9 "Daily Contact")

THE EDITOR DISCOVERS

The tree aristocrats of America - the largest remaining specimens of important species - are being sought in a nation-wide movement just launched by the American Forestry Association. Forest and field, highways and city streets, parks, estates and backyards the country over are to be searched for the largest oaks, pines, elms, sycamores, maples, hemlocks and other members of important American tree families. The Association hopes to discover the Nation's largest specimens of more than two hundred different kinds of trees.

Citizens everywhere are asked by the Association to join with landowners, lumbermen, foresters, conservationists, and with National, State, and local forest agencies in reporting the location, ownership, and measurements of unusually large trees. The measurements desired are the circumference of the tree, four and a half feet above the ground, its estimated height, and the spread of its branches. Photographs of the trees are also desired. This information, together with photographs, should be sent to the national headquarters of the American Forestry Association, 919 Seventeenth Street, N. W., Washington, D. C. When the largest specimens of each species have been finally determined, the Association will issue appropriate certificates both to their discoverers and to their owners.

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During the calendar year 1939 there were 212,671 forest fires in the United States, of which 98,033 were on protected areas and 114,638 were on unprotected areas, according to statistics compiled by the Washington Office Division of State Cooperation. These fires burned over 30,448,870 acres, of which 3,788,570 acres were on protected area and 26,660,300 acres were on unprotected area. Damages totaled $39,130,570 -- $10,243,010 on protected area and $28,887,560 on unprotected area. The number of fires by cause on protected areas only was:

Smokers	-	24,764, or 25.3 percent
Incendiary	-	22,635, or 23.1 percent
Debris burning	-	13,640, or 13.9 percent
Lightning	-	9,129, or 9.3 percent
Miscellaneous	-	8,966, or 9.1 percent
Campers	-	8,934, or 9.1 percent
Railroads	-	4,072, or 4.2 percent
Unknown	-	4,026, or 4.1 percent
Lumbering	-	1,867, or 1.9 percent

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Director James J. McEntee of the Civilian Conservation Corps has asked hunters to observe all possible care when hunting in the vicinity of CCC camps.

"There have been relatively few serious or fatal accidents in the past because of the splendid cooperation of hunters in observing warning signs posted about 333 camps and work projects," Mr. McEntee said. "Now that the hunting season is again in full swing, there arises once more the danger of enrollees being within the range of hunters' guns.

"I have asked each camp to post warning signs within a half mile in all directions of the camp and its work projects. If hunters will observe these signs, they will do much to minimize the danger of accidental injury to CCC enrollees."

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Proceedings of the Fifth North American Wildlife Conference held in Washington, D. C., March 18-20, 1940, will soon be off the press. Mr. J. Paul Miller, Secretary of the American Wildlife Institute says: "They constitute the most advanced and authoritative publication obtainable on developments in the field of conservation." Any personal or other orders; $1.00 per copy, should be sent to American Wildlife Institute, Investment Building, Washington, D. C. Back numbers for the second, third and fourth conferences are also announced as available for $1.00 per copy.

The Sixth American Wildlife Conference will be held in Memphis, Tennessee, February 17-19, 1941; headquarters, Peabody Hotel.

BRITAIN SALVAGING PAPER TO MEET NEWSPRINT SHORTAGE

(By a Staff Correspondent of The Christian Science Monitor)

LONDON-- Every morning nowadays when Londoners pick up their morning newspaper, they are reminded of the fact that, as in the case of meat, metals and petrol, there is also a shortage of paper.

The sometimes bulging journals which early morning commuters used to struggle with in the tubes have taken on the appearance now of something more in the line of an advertising circular. The "London Times", for instance, which hardly ever appeared with less than 30 pages of intensified news and feature reading, now finds difficulty in condensing even more news into a meager ten pages.

But if this is insufficient as a reminder of the paper shortage, the Government has taken steps to make the situation known. A salvage campaign has been in progress for several months now for the purpose of reclaiming as much as possible of an estimated 1,000,000 tons of waste paper which finds its way into the bins each month. The Government states in the circular publicizing its need, that "paper and board mills are crying out for more clean waste paper .. they need four times the amount they are now getting."

As far as newsprint is concerned, Britain has carried all its eggs in one basket. In recent years it has obtained 99 percent of its pulp supplies from Scandinavia and the Baltic, mostly via Norwegian ports. The sudden curtailment of supplies has found Britain with stocks of newsprint which it was said last April would be exhausted in three months and with sufficient wood pulp to last only two months normally.

Organization of new markets presents big difficulties, not least of which are those concerned with finding shipping space and paying large freight charges. In addition, Canada, which might make up the deficiency, has few mills for the production of solid pulp. The United States market is already experiencing a sharp upward trend of prices, scarcely suggestive of a surplus.

In Britain itself, there is only one large mill for the production of newsprint direct from wood. This has a capacity of 200,000 tons annually. Britain's own resources, wood and reed, could not produce more than 300,000 tons of newsprint a year. In an effort to tide over the long period which must elapse until an alternative source of supply is organized, British newspapers and periodicals are facing up to the need for drastic measures of control. Smaller papers, sales "on order only," a ban on new periodicals, elimination of contents bills, rationing of advertising space, production of poorer quality newsprint, abolition of circulation building activities, are the main steps which have been taken. The Government's Paper Control issued a retrospective order early in the year, limiting the amount of paper which mills may supply to customers for the three months up to June 1, to 30 percent of that supplied during the same period in 1939. Previously the ration had been 60 percent, and several newspapers and periodicals had been placed in the position of having already used all their ration. At the present time most proprietors are waiting to see to just what extent their papers will have to shrink in future, for the raising of rates must depend to a certain extent on the amount of space available.

When the shortage was first felt, one London evening newspaper, the "Evening Standard" maintained its rates unchanged and overcame its immediate difficulties by reducing the size of its type from Excelsior nine point to eight point and adding an extra column a page. The "Daily Mirror" and "Sunday Pictorial" added a column in the same way last January, but increased rates at the same time. Most newspapers have tried to maintain their individual features. Agencies as well as newspapers have cut down their staffs, and may have to cut them still further in future. The free-lance market is, of course, practically non-existent, with the exception of weekly and monthly periodicals.

RANGER WIESENDANGER TRANSFERRED TO TIMBERLINE LODGE

By A. O. Waha, Mount Hood

About 23 years ago, a very active young ranger was assigned to the Eagle Creek Forest Camp and believe it or not, his assignment there has been continuous except for one season when he was detailed to the Mount Baker to be the representative of the Service at the Mount Baker Lodge. Possibly this constitutes some kind of a record and one that could not occur again. Because of his initiative, aggressiveness, and imagination, Eagle Creek has become one of the outstanding recreation areas in the country. His enthusiasm in his work has never lagged and regardless of his long assignment no one could ever say that he was in a rut or in danger of getting into one.

The name of the ranger is so well associated with Eagle Creek camp that it is really unnecessary to include it, for when one thinks of Eagle Creek, Ranger Albert Wiesendanger enters into the picture. From now on, however, the public as well as Forest Officers will have to get accustomed to a change, for Albert has been transferred to Timberline Lodge, succeeding Junior Forester Maxwell E. Becker who has been transferred to administrative work in the Hood River district. Max pioneered in the Timberline Lodge job, made a splendid record, and gained varied experiences which will be of considerable value to him in his future work. As for Albert, the Timberline Lodge job will be "right down his alley", and in due time the visiting public will inevitably associate him with the Lodge.

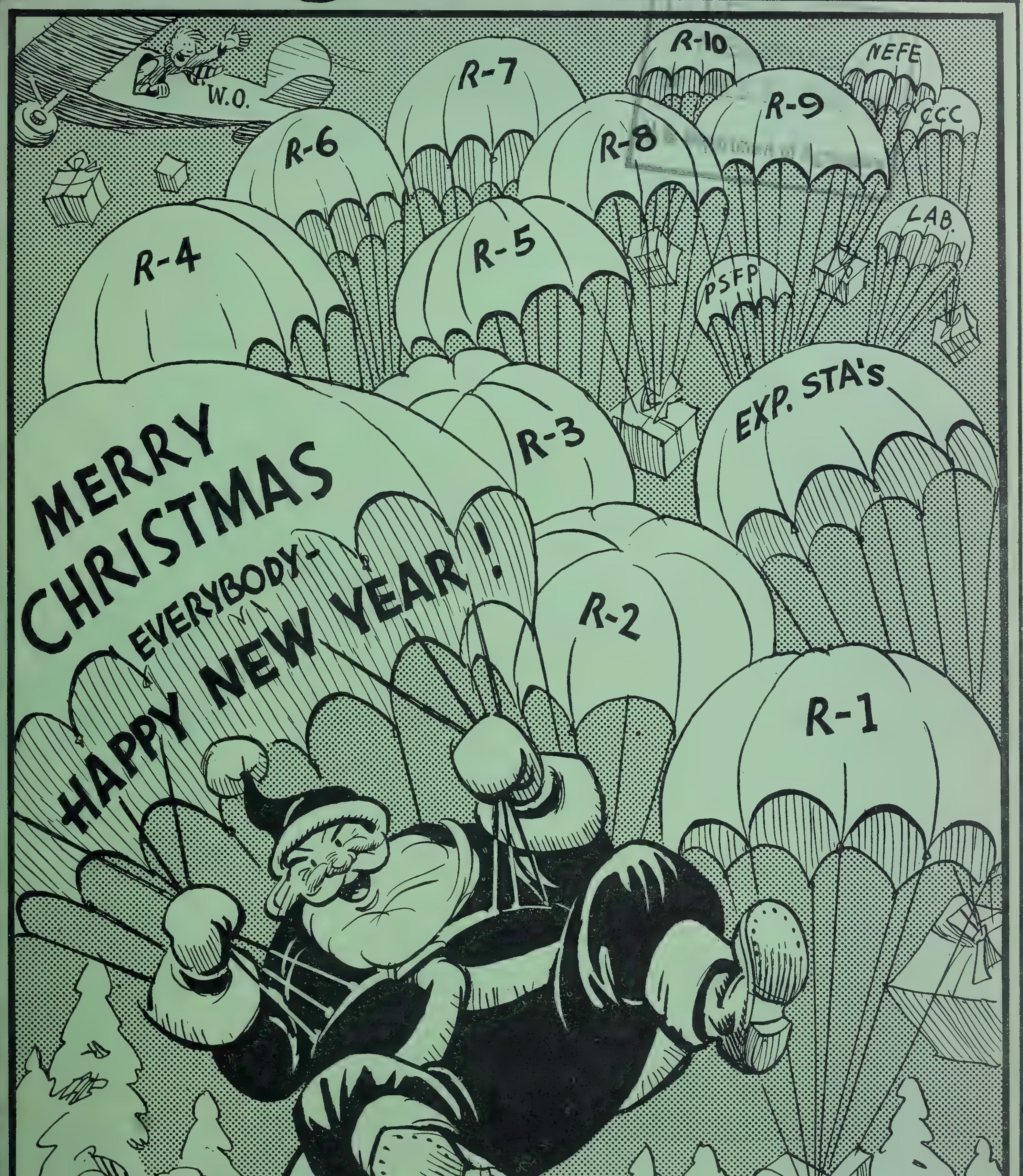
DEFORESTATION IN CHINA

This item, taken from Fairchild's "The World is my Garden", might be of interest to conservationists.

An agricultural explorer, Frank N. Meyer, who was collecting plants for U. S. Department of Agriculture in China brought back - "some remarkable photographs of the deforestation in the Wu Tai Shaw Mountains, west of Peking, which showed clearly the ghastly effects of erosion following in the wake of deforestation, and as President (Theodore) Roosevelt was then in the midst of his program of conservation, he was much impressed by these photographs, and asked Meyer for some of them to be used in his forthcoming message to Congress on the subject of conservation." - This was in 1908. (Sent in by California Exp't. Sta.)

Service Bulletin

Vol. XXIV ~ Nos. 25 and 26
December 9 and 23-1940
Washington, D.C.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EXP. STA's
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MERRY CHRISTMAS EVERYBODY - HAPPY NEW YEAR!
R-2
R-1
RUDOLPH WENDELIN

THE SPIRIT OF GIVING

Christmas symbolizes the spirit of giving, but giving is by no means confined to Christmas.

I am proud that we of the Forest Service know this, and practice it: proud that, from New Year's dawn to New Year's Eve, year after year, the men and women of the Forest Service are motivated by a determination to give a public service through which forest-land resources shall become sound and stable bases for better living within the pattern of this our own democracy, and in particular for people whose need is greatest.

This is the task to which we who make up the Forest Service are dedicated.

It is no easy task. Nor is it a task for the man or woman who fears apathy or inertia or active opposition. It is, instead, a task for strong but understanding and sympathetic men and women who inspire confidence in their team-mates and in the public, and who have an overpowering urge to make the resources with which they work contribute, always, to a more prosperous and a more permanent America.

This, I am confident, is the spirit of the men and women who today make up the Forest Service: a spirit that prefers to be on the giving end and represents true and worth-while public service.

It is in this spirit that I wish you and yours a Merry Christmas and a very Happy New Year.

EARLE H. CLAPP

THE TREE

By E. E. Carter

In my native town there was an old farmer who had no family and little money. But every year he got a share of Christmas joy. He furnished the Christmas tree for the Sunday School celebration. He planned years ahead, mentally marking young balsam firs in his woodlot for this future use, giving them room to attain the shape and density of leafage that made them most desirable, and cutting each in its turn. With the grumbles characteristic of a dour New Englander, he would bring the selected tree to the church, set it up, look at it for a minute or two, and then turn away to his lonesomeness.

Attempts to thank him were apt to be rebuffed. Still less did he want to talk about why he had taken this chore upon himself, or what the tree meant to him. Perhaps he had no great thoughts about it. But as the years have passed it has seemed to me that his acts were representative of Christmas - thought for the enjoyment of others; the giving of what one has to give; the setting up of the green symbol of the renewal of life and growth - immortality.

Also, as the practice of having Christmas trees has grown until now some statistically minded person has estimated annual use in this United States at 9,000,000, and the supplying of that number has developed into a real business, the fir remains the best Christmas tree. Why add to the necessary work at this season by having a tree that begins to shed its needles as soon as it comes into the house? The true firs keep their needles on the twigs. Why have an odorless tree, or even run the chance of getting a bad smelling white spruce? The buds of the balsam fir have a pleasant odor. Why have to watch lest the baby get his hands pricked by sharp stiff needles and express his displeasure with lusty howls? Fir needles are soft and blunt-ended. So watch the dad who is a forester pick for a fir, when he has a choice.

My Maine farmer acquaintance did not go very far down the road of Christmas tree growing. He did not plant trees for the purpose, but took care of what the Good Lord gave him in the way of natural reproduction. He did not overcut. He may not have been a silviculturist, but he knew that he was improving his stand when he cut a fir that was crowding a young white pine. Mixed motives or not, when he died his woodlot was in good condition, and was valuable. His Christmas tree cutting had helped it, not injured it.

So the 9,000,000 (or whatever the number is) can be taken from the forests of the land without hurt, if done the right way. And that means work for many who need even temporary jobs as the cold of winter nears. It means extra work and wages in transportation, in distribution, in retail selling, even in trash disposal afterwards. A luxury trade? Yes, in the sense that Christmas trees are not essential to existence, but man does not live by bread alone, and symbols can be words from the mouth of God as well as - often better than - the printed page or the oration. Let's each get a green Christmas tree (preferably one with a red tag, and preferably a fir) and enjoy it, not so much to satisfy whatever color sense we may have, or to feel that we are doing the customary thing and therefore the neighbors will think well of us, but for what it represents. It will add to the Christmas joy and my wish is that you each may have that in abundance.

FOREST RESEARCH AND DEFENSE

By C. L. Forsling

This season of charity and good fellowship finds our country engrossed in preparations for the defense of a hemisphere, as the highest form of national peace and good will now practical. The watchword, "It is later than you think!" paces the rapid acceleration of our preparations, which reach out into a great variety of activities all focused in some degree upon the multitudinous needs of this great program.

In the outdoor and indoor laboratories of forest research, there has been instant and effective response to the concentration on defense needs. The Forest Products Laboratory is already perfecting materials and methods for greater efficiency in the manufacture of training planes, gas masks, explosives, fire retardants, shipping containers, housing for munitions and other defense workers, and so on, as immediate "front line" defense needs. Meanwhile, at the Laboratory and throughout the field, studies are being concentrated on the equally essential "second line" of defense, which includes maintenance of supplies of essential raw products and services of our forests and forest ranges, contribution of many skills and techniques developed and improved in forest research that are adaptable to defense demands, aid in the maintenance of the Nation's economic front, and the improvement of trade relations in the field of forest products with our defense allies in North, Central, and South America.

One of the projects upon which forest research is farthest advanced is the perfection of a method for obtaining alpha cellulose of high purity and viscosity for the manufacture of nitrocellulose. This new process removes from the wood the entire cellulose content. From this holocellulose is obtained an undegraded alpha cellulose, amounting to 50 to 52 percent of the original dry weight of the wood, as against the extraction of 38 percent by former methods and with a viscosity comparable to that of cotton.

To the quick and relatively cheap manufacture of fuselages and wings for training planes our contribution takes the form of a wood product that may be molded into any shape, will neither shrink nor swell, and has all the desirable properties of the original wood in intensified form. This material is not a plastic, but wood treated with a plastic solution which enters the wood structure, is further polymerized, and becomes in effect an integral part of the wood structure under application of moderate pressure and relatively low heat.

Plastics, such as are now obtainable from the lignin content of wood, are being studied with a view to their use in the production of airplane parts. We have developed from lignin a substance that raises the octane rating of gasoline. This lignin derivative, although not as effective as tetra-ethyl lead, is more effective than other anti-knock materials in common use.

Cheap, quick housing for a multitude of defense workers, who for good reasons may have to be shifted wholesale to new centers of activity, is already receiving attention. The demand is for demountability as well as prefabrication in such housing.

One of the most important efforts in the second line of defense is the promotion of closer contacts with the other republics of the hemisphere through improved trade relations.

The whole group of related resources and industries with which forest research deals represents an especially promising field for such improvement, since the many rare and valuable hardwood species native to most of the Latin American countries offer no direct competition to our own principal production of softwood products, especially pulp and paper. Thus far we are gathering all available data on wood resources of the neighbor nations, on the forest industries and forest-products trade possibilities in the individual countries, and on the possibilities of the United States as a user of these Latin American products and as a source of supply of other forest products to them. The immediate result is to reveal an urgent demand to bring such information up to date and to fill in the gaps. This the Forest Service is ready and waiting to undertake as soon as budgetary limitations on such work are removed. In this same field of Latin American relations our Tropical Forest Experiment Station takes the modest role of a newcomer, but with much promise of future usefulness.

Information supplied by forest economics, including the forest survey, is serving a highly useful purpose in quick assembly of information for both military and economic national defense. Range management is providing a basis for a sounder policy of range livestock production than the "increased number of stock" philosophy of the last World War. Bolstered by knowledge obtained through forest management and forest influences research, it is possible now to establish guiding principles for strengthening our forest resource base as a part of a sound, long-time national defense program.

Although so much of the world is in distress at this season when peace and good will should prevail, there is comfort in the thought that forest research is contributing some share to what will assure peace and security for all in the future.

CHRISTMAS IN THE IDAHO WOODS

By Edward Ritter, R.7

Every year of my life, so far as possible to remember back into my childhood days, Christmas had been spent at home with my folks, in the house where I was born, amid customary surroundings, tree, decorations, and all the trimmings. But times had changed for me. Twenty-five years had passed. Conditions were different. I was out on my own, in the Forest Service in Idaho.

The job of marking and scaling timber on the Halleck and Howard sale, Payette National Forest, Region 4, must go on. The gyppo's had high-balled all summer. On Thanksgiving Day operations halted only for dinner. And now, Christmas was approaching. Everyone was working feverishly to clean up Pearsall Creek. The camp was to be moved to another drainage before heavy snowfall. That meant only one day would be spared for festivities.

Any possibility of getting home by December 25 was out. There was nevertheless a chance, weather permitting, to get the camp moved before that time, so as to enjoy the holiday in the new location. Shortly before Christmas I saw my domicile picked up by the jammer and loaded on a flat car along with many other shacks of similar quality and design. My one prerogative was to point out the spot for unloading at the new site. The choice was limited, as slopes were steep and canyon narrow, but luckily a relatively level spot was found unclaimed. With the help of a team, a bit of digging down at one end, and jacking up of the other, the cabin was eventually adjusted to allow the door to open and close. This was remarkable, so I was told by my affable neighbors who were more experienced in the art of moving than I. However, I found it necessary to make adjustments for outslope and chunks were placed under two legs of the bed, thus establishing a temporary equilibrium. A more satisfactory job could be done when spring came, but now important Christmas plans awaited action.

The "must" job was that of procuring a symmetrical Douglas fir of proper size. This was easy, as one had been spotted weeks before, and the task of getting it to camp was simple.

On Christmas Eve the cabin was in readiness -- candles were lighted, decorations glistened, and strains of "Silent Night" flowed softly from the Victrola. Logging Superintendent "Moonlight" Joe O'Mara, the camp cook, and blacksmith's family were among those to greet and cheer me on this occasion. Seldom have I felt so happy, even though lonely. Friends of the Service are tried and true the country over, and they have a way of getting into your heart under such circumstances. May they be blessed with peace at this Yuletide.

But in peace or war, on farm or forest, in city or village, on Christmas Eve there is no place like home, even for foresters.

OUR CCC FOREST POPULATION

By Fred Morrell

Christmas 1940 is the eighth since the beginning of the Civilian Conservation Corps. It is the eighth Christmas that CCC boys have spent within National and State Forests. In the 600-odd forestry camps there are more than 100,000 enrollees doing the conservation job. Since the beginning more than 1¼ million young men have been doing practical conservation work in camps operated by the Forest Service. That is a lot of people - approximately one percent of the population of the United States.

While the output of the individual enrollee may not have been large, the CCC, with its thousands of camp years, has accomplished an immense amount of the work that we had long planned. The CCC has gone beyond that into work that we had never seriously thought of, nor had hoped to do.

The CCC brought to the Forest Service two serious responsibilities that it is well to recall at the end of another year. The first was to plan and carry out important or at least worth-while conservation work projects. The second, and more important, was to train youth for citizenship. A good citizen must be willing and know how to perform some useful work. He must be willing and know how to adapt himself in a complicated civilization. Above all, he must believe in our system of government and be willing and know how to contribute to it. And he must be fair in his judgment as to the returns to which he as an individual citizen is entitled. A satisfied worker or citizen must believe in his work and have confidence in and respect for those who direct it. And he is entitled to inquire continually whether he receives the benefits to which he is entitled in a democracy.

We have had mostly well-planned and worth-while work projects. We need, however, to inquire continually whether all camp projects are worth while. And we should inquire whether the work to which each enrollee is assigned is worth while and of a character that should result in a pride in it and a consequent feeling that the youth is, through work, making a real contribution to society. A million and a quarter is a lot of men - a whole "forest" of people; even our current 100,000 or more is a lot, or a single camp of 200, when we think of them as individuals. To reverse an old adage, we may be in danger of not seeing the trees for the forest.

The CCC has done a great deal to improve Main Street's confidence in the great group of young men whose families were largely, because of the depression, in economic distress. Hundreds of letters, telegrams, telephone calls, and personal interviews used to protest the location of camps in holier-than-thou communities. That has long ago changed to an even greater storm of protest when a camp is to be moved. And bureaucrats cling tenaciously to the camps they have and ask for more on every occasion. "The haves" still tend to overlook the claims of "the have-nots." Communities and the work agencies have accepted the camps. Have they "accepted" John Enrollee, or is he someone who still lives on the other side of the track? And has he accepted them, and does he feel that he belongs? These are important questions. They are important both to John as an individual and to our democratic institutions.

Why do we raise these questions? Because of so many letters telling us what kind of a fellow John Enrollee should be to improve our forests most, and how we have trained him to do it. Because we receive so few letters on what kind of boys should be enrolled in order that the CCC may contribute most to improving American citizenship. Also, just how certain are we that we have done a good job at that?

We believe these are questions that we, as forest administrators, as forest managers, as youth managers, should think about.

THE SPIRITUAL STATUS OF FORESTRY

By L. F. Kneipp

Four decades ago, American foresters coalesced into a definite professional group. They drank of the heady wine of high idealism, of the spirit of unselfish devotion to the public good; were fired by a zeal that brooked neither discouragement nor defeat; tacitly adopted superlative standards of intellectual, ethical, and moral integrity; dedicated themselves to the full fruition of all of the forms of human service inherent in trees. One almost might go back to King Arthur and his knights of the round table, to the search for the Holy Grail, for an adequate analogy.

Many moons have waxed and waned. A second generation of foresters has come into existence; a third generation is well on its way. Some of the pioneer group may see their grandsons actively practicing the arts of the forester; with greatly improved techniques, more adequate scientific data, superior equipment. But what of the traditions, the ideals, the spiritual stimuli? Have they kept pace? Have they even been maintained in their earlier measure and fervor?

Those are questions to which no single person can give a dependable generalized answer. Only each individual forester can give the answer for himself and by himself. It is not a question of whether one great flame is being kept burning brightly and undiminished upon a single great altar, but whether many thousands of component flames are being kept burning brightly and undiminished on as many individual altars.

And if the collective answers are less than completely affirmative--what then? Will the explanation lie in the conclusion that such high idealism is impracticable in the realism of a material world; that foresters perforce have adapted themselves to the dominant philosophies of their times? Or will it be that foresters lured by apparent current advantages have allowed a rare and precious influence in their lives to lose much of its potency and priceless value?

This is not a modern poll to cross section or sample the spiritual status of foresters and express it in quantitative forms. It is merely a suggestion that each forester poll himself and work out his own percentage; decide whether he personally is satisfied with that percentage or whether in retrospect, it is now clear to him that certain compromises he had made between material advantage and professional idealism had taken more from him than they had given to him. Suppose that a man in the honesty of his own intimate thoughts arrives at the latter conclusion. What can he do about it? If he is of the first generation of American foresters, about all he can now do is to reaffirm his faith in his early ideals as proved by a lifetime test of trial and error, as a guide to the foresters who are to follow after him. But if he is of the second generation, he can yet so shape his professional career as to perpetuate and enhance all that is best of the ideals, and ethics and morals and traditions that have been voiced or exemplified by the leaders of forestry in the United States.

HUMAN NATURE AND FIRE PREVENTION

By John P. Shea

Human nature problems run through our jobs like the warp and woof of a piece of cloth. It has often been said that 90 percent of the work of the Forest Officer is public relations. How many problems of land-use can you think of, wherein the needs of the situation do not also involve human needs?

Then why not systematically study the public in connection with fire prevention problems? To do so would surely be in keeping with the fundamental principles of a democracy which, as the philosopher, R. B. Perry, reminds us, "is not the agreement of the people with the Government, but the agreement of the Government with the people."

To get down to cases, let us look at it this way: If forest fires were caused by insects, it would certainly be logical to call in entomologists and direct them to make systematic studies of the insects involved. Such studies would among other things, investigate their life cycle, their environment, their feeding habits, - even their social and unsocial behavior, such as fire setting. Such studies would seek the motivation behind the fire setting and other forms of "cussedness."

The same holds true of human beings. The country over, more forest fires are caused by man than by any other agency. Man-caused fires, therefore, are primarily problems of human behavior. Being such, why shouldn't they be systematically attacked by scientific psychology, - the science of behavior. To attack a human behavior problem by scientific psychology means that we study human groups and individuals by means of scientific methods and techniques, and do so as objectively as possible.

This is being done every day in other fields of human activity, such as industry. Merchandising surveys eliminate guesswork and seem to pay big dividends. Why isn't it logical to do the same thing in connection with our public relations work and fire prevention? We think it is, and are doing so.

In the past two years several National Forest areas were selected where man-caused fires are a serious problem. In those spot areas in Missouri and Kentucky, in Montana and Alabama studies have been made of the people - both residents and visitors - who cause forest fires. Social scientists have been sent into densely populated and much used Forests to cruise the people and describe the human types found there in much the same way that foresters cruise timber and make type maps.

In a preliminary way we have attempted to get a reasonably clear and objective picture of the people who use - and burn - our National Forests. We have sought to understand their needs, attitudes, customs, economic level, habits, - even their prejudices and "human cussedness."

With this closer understanding of them as human beings it is felt that we might come a little closer to seeing through their eyes and understanding their ways with the woods. Thus perhaps we could prevent mistakes and save time in our attempts to gain the cooperation of the public in preventing fires. By understanding the other fellow's needs, frustrations, and yearnings, we may perhaps better understand the motives for his woods burning, - and do something about it.

It is thought that we might gain new light on how to reshape our appeals to the public - for example, how to revise our signs and posters. And we hope to find hints as to what the Service might further do for the benefit of the public and the education of the public in the use and protection of their forests. Yes do as well as say for as you know, there is propaganda-of-the-deed as well as propaganda-of-the-word.

At the present time there is being made in Florida a study along the lines of sampling of Forest residents' and visitors' attitudes as they relate to fire prevention. It is a cooperative field survey sponsored jointly by the Florida State Forester and Region 8. It is hoped that similar studies on the human side of forestry problems will be extended to other National Forest Regions.

TEMPERATURE TRENDS - UPWARD

By E. W. Loveridge

Range Management and Fire Control men, as well as those interested in Water Management, will probably find much of interest in the statement in the recently prepared preliminary Upper Gila River Basin flood survey report that "there has been a tendency for temperature to increase throughout the United States." Geological Survey Water-Supply Paper, 772, published in 1936, is cited as the authority for this statement. Roughly similar statements with regard to precipitation have been common during the past few years and have been used in connection with fire danger, range management, and other resource management problems, but that there has also been a decided increase in temperature, although probably to be expected during periods of drought, has not been commonly discussed.

The Upper Gila Report points out that the determinations in Water-Supply Paper 772 were based on an analysis of mean annual temperatures only and in determining the general trends related to the Southwest. But for the Gila River study the temperature records provided a breakdown of the annual temperature into summer and non-summer seasons for the period

1877 to 1939 and their five year progressive averages. "With respect to the summer temperature, an upward trend is indicated beginning about 1914. For the succeeding 5-year periods through 1936, the 5-year progressive average increase during the period was about 4 degrees. For the non-summer season a similar increase took place."

The report further points out that the "significance of this rise in temperature on rainfall-run-off relations cannot be appraised exactly," although Adolph F. Myer in his Elements of Hydrology states that "other factors remaining constant, the rate of evaporation is approximately doubled for every 18-degree increase in temperature."

The report continues: "considering the enormous influence which evaporation and transpiration play in the rainfall-run-off cycle in the Gila River Basin, it seems logical to conclude that present water deficiencies may result in part, and perhaps in large part, from the increased aggregate loss of water resulting from the marked increase in temperature."

BAKED APPLE CLUB

(A talk by John H. Hatton, Assistant Chief, Division of Wildlife Management, at a meeting of the Baked Apple Club at the home of Gifford Pinchot, Washington, D. C., May 2, 1940.)

(Cont'd. from November 25 issue)

My first work in the Service was with a mounted field party in western Nebraska and as a result of that summer's investigations we have what is now the Nebraska National Forest -- one of the greatest monuments to afforestation in my judgment that this country has so far erected. I have always been glad that I was a member of that first Nebraska party. It is an inspiration that comes but few times in a lifetime to go there now and look out on thousands of acres of successful coniferous plantations in various stages of growth and development.

Now we have the great shelterbelt project, to which I had the good fortune to be assigned for a year and a half when it started. It passes through the very section of South Dakota where, as a boy, I helped to plant trees and leave monuments in successful groves; through the section of Nebraska where I spent my first field season; through a part of Kansas where during my second year in the Service I made a similar examination of sandhill conditions in that State; and on south through Oklahoma and into Texas.

I have large enthusiasm for the shelterbelt. I hope it will continue in some form. It is a pity that it hasn't been put on a more regular budget program and basis. I hold it to be one of the finest undertakings in the history of the Forest Service. There was need for an enlarged forestry expression and revival of interest in that section of the Plains States to give all sections of our people an opportunity for closer to home forestry expression. The shelterbelt has eminently supplied that. It is forest extension personified.

But I must get back to the early days.

The personnel of our party consisted of Royal S. Kellogg from Kansas, immediate chief of party, and L. C. Miller of Oklahoma, second in command. Miller had been in the Service a year and was getting $60 per month. I didn't learn whether Kellogg had yet graduated from Student Assistant. I know it has taken five digits to express his remuneration since he left the Service. L. C. died from an appendix operation in Denver about 1910. Had he lived he would have achieved high rank in extension forestry.

Then there were the late F. G. Miller of Iowa who became prominent in forest school organization work in the Northwest; Hugh P. Baker, now President of Amherst College; and E. P. Bailey from Dartmouth. Bailey left the Service after a year to teach science in Boston and so he could earn enough to get married; and myself from South Dakota, who has remained in sort of status quo. We four received $25 per month.

Oh yes! There was Scott - C. A. Scott from Kansas, our cook, camp tender and mule driver, on a salary of $40 per month and the financial envy of us all. Scott became the first Supervisor of the Nebraska Forest. He has been in and out of the Service but has always identified himself with private nursery enterprises and is still so connected in Kansas. So he never really got away from forest extension. He has perhaps contributed more to it than any of us.

I have never been associated with a more vigorous, aggressive, interested and forward-looking bunch of fellows. There was an undercurrent of the keenest rivalry, yet with it all a feeling of friendship and fellowship that is not soon forgotten. You see, Mr. Hall back here in Washington, who had really conceived the Nebraska project, and was in general charge of our party, visited us a couple of times during the season and had told us that owing to the condition of the exchequer back here, Mr. Pinchot had decided that there probably wouldn't be many student assistants brought into Washington that fall; and we all wanted to come in. Each of us had been writing home to his folks and to his sweetheart that he had accepted an important position with the Government and the thought of quitting so soon and perhaps going back home to face explanations about forestry inconstancy were more than we cared to contemplate, even in imagination. I think each of us almost prayed that if any must be left back, "Oh Lord, let it be the other fellow."

But Glory Be! We were all brought in. Even Scott, the cook, about the first of the year, came strolling in himself as big and as proud as life.

What a glorious city this was, and what a wonderful time we had living within our salaries, which had been increased on our arrival from $25 to $40 per month and our titles changed, first to laborers, and then to Assistant Forest Experts. It was necessary to do something to justify that extra 15 dollars.

I remember Baker and I got a room in the 1800 block on 9th street, now a colored quarter, (it seemed 18 miles at first to feet that were not used to city pavements) where we slept in the same bed, used the same washbowl and pitcher, the same razor, and where we almost sat in the same chair. For those accommodations we paid $8.00. Eight dollars per week, do you ask? No! Eight dollars per month. Eight dollars per month apiece? No! Eight dollars between us - $4.00 apiece. Bailey was in the same house in a room by himself. He was a plutocrat and paid $7.00 per month. But I always thought he must have had help from home.

We almost never rode the street cars and I'm sure there were few places of interest in Washington and its immediate environs that we didn't see before spring.

We lived on 10 to 15 cent breakfasts and 15 to 20 cent suppers and 3 to 6 cent lunches. One good thing we drank lots of water in those days. By spring we had so long denied ourselves a full meal that to take on a 35 cent feed would have put us to bed and called in the doctor.

But the Baked Apple Club helped us out. We wore a footpath to 1615 Rhode Island Avenue that I have looked for in subsequent visits to Washington. Here we rubbed elbows and discussed the problems of state each Thursday evening and managed to get along until the next Thursday.

For mutual benefit and advancement the section of tree planting organized an evening forestry club. We were called "Potato Bugs." I don't know why unless we were mostly from agricultural sections and knew not only how to raise potatoes but to de-bug them. We met at the homes of different ones about once a week. The stenographers of the section were in on this. I remember particularly Miss Fannie Allen and her sister, Miss Latimer, and Mr. Hall was always present at the meetings and took an active part. He seemed to be especially interested in his little coterie of helpers, if such you could call them.

We also had good training in frenzied finance. I remember Baker used to borrow $2.00 from my pay envelope once each month. We were paid in cash twice a month and Baker used to borrow $2.00 from me on one of those pay days with what got to be very monotonous regularity. I didn't ask him what it was for and didn't learn until the next year out in New Mexico, where I met up with his brother, J. Fred Baker. We were collecting juniper seed for the new Nebraska nursery. After we had established confidence I got it out of him. J. Fred told me that Hugh P., with my assistance, was buying the girl he afterwards married a diamond solitaire engagement ring on the installment plan.

But those were good days! We felt we were doing important work. We were doing important work. And no feature of it all to my mind has been more fascinating than to watch how young men blended their lives into it.

Our leaders have seen far into the future. I have often been amazed by their foresight. They have constantly aimed at greater perfection in organization -- greater service to forest users -- better protection to the forests themselves. And they have realized the direct good that would come from perfection in organization and from placing men where they could do the best work. But I have often wondered whether any of them, not excepting the chiefs themselves, have ever calculated or come anywhere near calculating the total amount of what I have called indirect and unrecorded good that has been exercised by the men and women of the Service, here and all over the mountain States, daily and unconsciously leaving the impress upon communities everywhere that here has been a progressive army of men and women, working in a great Department of a great Government because they liked their occupation, because they sensed somewhat of its national and public significance and not primarily, at least, because they were provided with jobs and salaries. I believe that impression gradually claimed the attention of the American people. Love of the work, loyalty to high ideals, and devotion to a public cause, have been the watchwords of the Service. I used to say continue to keep them before us and no changes in political administration, or revolutions in internal policies, or watchdogs of the treasury, or Senate investigations could tear them down.

In very recent years and months I have wondered how much longer I will be able to shout my doctrine from the same platform. To the everlasting credit of foresters and the Forest Service be it said that conservation has become a part of the very warp and woof of this great country. Different labels may appear for different phases of it, but the broad principles will endure. And considering the quantities of good seed that have been planted through nearly two-score years, the conservation crops that have been tended and harvested, it would be to the great discredit of foresters and the Forest Service alike if they had to hold a continuous monopoly on the Nation's stock in conservation.

Naturally I don't like to talk about reorganization and transfers. The subjects have been disturbing and I think have temporarily affected interest and maximum efficiency, but the great cause has spread to many Departments of the Government and increasingly larger harvests will be reaped. I don't mind saying a word about the big transfer that occurred on February 1, 1905 which brought mountains of work for us all.

I remember the newspapermen besieging the office here for items and articles. I remember E. T. Allen coming to me and asking me to prepare an extended article for the representative of the "Kansas City Star." I recall the closing paragraph of that article, conceived, it seemed to me at the time, in a moment of inspiration as I tried to project my thought and mind into the future. It has furnished the guiding principles for all my best thought and effort in the Service whatever they may have been.

It ran like this:

"The Forest Reserves, (as they were called), with necessary modifications in policies from time to time to meet changing conditions and needs, are here to stay. Their primary objects are protection and use as against abuse and prodigal waste. They are not the promptings of fairy dreams or perverted sentiment but they are the products of cool business judgment and methods. They consume the interest on the principal or the coupon on a bond, leaving the bond itself intact. They represent a public policy with reference to natural resources and human welfare which, while it seeks to protect and foster the present, is not so narrowly confined, but looks to the remote future and generations, yet unborn, are going to reap the benefits of its wisdom and timeliness." That was nearly 40 years ago!

Meetings like this help to point up and reinforce those foundations upon which to construct more years of progress and achievement; and may I add that personally I haven't any regrets at all at having given all of the best years of my life to that thing we have called forestry and American conservation.

NEW WINTER UNIFORM

By Robert S. Monahan

Forest Officers assigned the formidable responsibility of supervising recreational activities on winter sports areas will be identified this season by a new uniform with distinctive insignia. These cold weather field clothes are essentially a combination of the current vogue in ski attire with the traditional fabric approved for seasonal and permanent personnel.

Our new winter outfit owes its origin to a realization of the obvious fact that the regular field clothes are not adapted for use on the snow slopes and that Forest Officers wearing conventional winter clothes are not easily recognizable by visitors needing information and assistance.

Based on recommendations submitted in 1939 by a special North Pacific Region committee which experimented with various outfits on the Mount Hood National Forest, the recently adopted specifications were also reviewed by the nine Regions located in the snow belt.

The winter uniform consists of a ski cap with ear flaps, a weatherproof jacket, and ski trousers of downhill or instructor type. The fabric is either bronze heather green in 14 or

16 ounce serge or 19 ounce elastique for year-long personnel or forestry green in serge, gabardine or elastique in various weights for temporary employees.

Most distinctive feature is a four-inch orange armband indicating responsibility which was adopted to lessen confusion with the felt arm insignia worn by many ski club members. On the armband is embroidered in black on white the regulation Forest Service shield outlined by a green diamond.

By the adoption of these winter field clothes visitors to our recreational areas should no longer have much difficulty in locating our responsible representatives and Forest Officers themselves can carry on in uniforms designed and tailored for more attractive effect, greater comfort, and increased safety.

WHO IS RESPONSIBLE?

By Wilbur R. Mattoon

The concern of the Forest Service -- particularly in the Southeast -- is doubtless well known in regard to the expanding pulp and paper industry in that area and in bringing about better cutting practices by farmers on their woodlands with a view of maintaining crops of growing timber as a substantial means of increasing the farm incomes.

Based upon inspections made last spring the Atlanta Office reports fair to good progress being made in pulpwood cutting practices. While some pulpmills had allowed heavier cuttings than the preceding year, certain others had made noteworthy advances. In his letter to one of the better companies, the Regional Forester commended the organization and added this significant sentence: "It is recognized that one of the biggest jobs now is to convince landowners of the wisdom of retaining their residual timber for growth and of making partial or selective cuttings."

The above quotation is of much significance to all agencies engaged in the extension of forestry to private owners. Particularly, this constitutes a challenge to the Federal and State Extension Services which are agencies specifically engaged in attaining that educational goal. They deal with farmers from whose woodlands is coming the bulk of approximately 4,500,000 cords of pulpwood consumed annually in the South. The situation, in fact, presents a challenge to the best efforts of all forestry agencies for this is a day of wide-reaching cooperation. It rests with them to win over the farmers to a program and a practice of making light and relatively frequent cuttings that will mean frequent recurrent boosts to the family income. Meanwhile under such a selection system a good growing stock is kept on the land and the inferior material only is sold for pulpwood as a salvage crop while growing high grade products of poles, piling and sawlogs.

A letter sent to all of the State Extension Foresters in the South on the above report by Region 8 brought replies, one of which hits squarely the subject of responsibility for the kind of pulpwood cutting that is now going on and the farmer's interest in maintaining a crop of growing timber. The statement, by R. W. Graeber, Extension Forester in North Carolina, is as follows:

"I often have the question asked, 'Will the pulpmills ruin or destroy the timber supply of the South?' My answer is always, 'No, the pulpmills will not, but the owners of the timberland may destroy our future supply of timber.' In giving such a reply I always explain that the pulpmills are interested in a continuous, long-time supply of timber. Therefore, they want to preserve a growing stand. Then, too, neither the owners and operators of the pulpmills nor the pulpwood contractors can or will do anything in a body of timber that the landowner does not agree to or permit. I further state that there are times when the landowner himself requires the operator to take everything that is salable. On the other hand, quite often the landowner sells the timber to a pulpwood operator for a lump sum; therefore, the pulpwood operator is interested in getting all he can from the land under his contract, and he strips it. The landowner himself is the keyman and controls the operation. We have been stressing this point with our farmers and timber owners at every opportunity. We have used posters, circular letters, news articles, and statements at our various forestry meetings, trying to promote this idea of protecting a reasonable stand of timber on the land as growing stock. We will appreciate any suggestions or help that the Washington Office can give us along this line."

If it is true that "the landowner himself is the keyman and controls the operation," then the thing to be done by the interested public agencies would seem to be to bring this keyman (the farmer) into such a position whereby he will be able to decide what constitutes profitable and unprofitable timber cutting practices.

Undoubtedly there are several ways or methods of bringing about this desirable knowledge on the part of the small landowner. One such effective approach to the problem is thus expressed by Extension Forester M. H. Bruner:

"Here in South Carolina we have been attempting to approach this problem through the pulpwood producers. We are setting up complete pulpwood thinning demonstrations in cooperation with pulpwood producers, who have agreed to thin a farmer's timber in accordance with Extension Service recommendations. The results thus far have been excellent. Through this program, the pulpwood producers are being gradually educated to better cutting practices as well as farmers who are going to demand more and more of this type of cutting upon the part of the pulpwood men. In other words, this program is very effective and is narrowing the gap that has existed between the farmer and the pulpwood man because of the latter's past cutting practices."

The sooner and the more widely the real situation of responsibilities becomes known and appreciated the better the chances will be of substantial advances by farmers and other small owners in adopting sound timber cutting practices on their lands.

HIGHLIGHTS OF A PAPER BY RAPHAEL ZON, DIRECTOR, LAKE STATES FOREST EXPERIMENT STATION, READ BEFORE HEARING HELD BY COMMITTEE INVESTIGATING MIGRATION OF DESTITUTE CITIZENS AT CHICAGO, ILLINOIS, AUGUST 19-21, 1940.

The northern portions of Michigan, Wisconsin, and Minnesota, comprising roughly 76 counties, are commonly referred to as the cut-over region. The name suggests that it was once a timbered region from which the timber has been removed. This is not entirely true. Mining of copper and iron, and to some extent farming, play an important part in its economic life and are also responsible for the present economic condition. The region includes some 57 million acres (about 1½ times as large as the New England States) and has a population of about 1½ million people.... The cut-over region has been richly endowed with natural resources: forests, minerals, lakes, and large acreages of soil suitable for agriculture.... In the course of three or four decades the economic picture has changed completely. The copper mines, which at their peak produced 96 percent of all the copper in the United States, in 1933 produced only 9 percent and employed less than 2,000 workers.

The iron mines in the Lake States still produce about 86 percent of all the iron mined in the United States, and yet employ today fewer men.... Only 18,000 men were employed in 1937, against the 35,000 men employed in 1910, although 33 percent more ore was taken out in 1937 than in 1910.

Some 90 percent of the original merchantable timber is now gone, and most of the large sawmills have been closed.... The number of workers employed in logging and sawmilling has shrunk from 117,000 in 1890 to 12,000 in 1933.... Between 1840 and 1860, the number of sawmills increased from 615 to 1561. In the latter year, lumber production exceeded 500,000,000 feet.... In 1870, 2,500 sawmills reported production of 3,500,000,000 board feet of lumber.... During the next three decades the lumber industry came rapidly into maturity and passed into old age. Peak production in Michigan was reached in 1889 at nearly 5,500,000,000 board feet. Wisconsin and Minnesota reported their greatest output in 1899 at over 3⅓ and 2⅓ billion board feet respectively.... The full effect of timber exhaustion in the Lake States was not felt until after 1929.... Salaries and wages dropped from $182,000,000 in 1929 to a low of $57,000,000 in 1933....

Forest destruction gave rise to a new economic phenomenon, namely: tax delinquency on an unprecedented scale, brought about by the abandonment of millions of acres of cut-over land by its original owners.... Tax delinquency today is at the root of most of the economic difficulties of the region.... Today, with the decline of the lumber industry, the collapse of the land boom, many communities are left saddled with debts beyond their capacity to pay.... Land abandonment by timber owners and land speculators has left the farmer, home owner, and businessman to bear the burden.... Tax delinquency, once started, forms a vortex into which other properties not yet delinquent are being constantly sucked. As more land becomes tax delinquent, heavier taxes are shifted to solvent taxpayers, driving one after another into delinquency.... In some counties of northern Minnesota, as much as 65 percent of their gross land area is found to pay no taxes to the support of the local government. Of the 40 or 45 million acres of so-called "wild land" in the cut-over region, 21 million acres, or nearly one-half, have become tax delinquent. Of these, about 13 million acres have been purchased by the Federal Government for National Forests, or have become State or county forests. The remaining 8 million acres are practically "no man's land"....

No other region illustrates the relation between migration and economic opportunity as does the northern Lake States.... During the 30 years between 1880 and 1910 the population had more than quadrupled. Beginning with 1920, when the output of the copper mines shrunk almost to nothing and mechanization of the iron mines threw out more than half of their workers, and the sawmills began to close, there began a gradual exodus of workers from the region. As a result of this there was a decline in the population between 1920 and 1930 in most of the cut-over region. Beginning, however, with 1930, when the opportunities for employment in the cities as a result of the industrial depression had decreased, there became manifest a back-to-the land movement. In northern Minnesota, for instance, some 17,500 people had moved to farms between 1929 and 1934. A slight increase in population has been noticed since 1930 in northern Wisconsin and northern Michigan. Some came from distressed agricultural areas in North and South Dakota, and a considerable group came from cities of over 10,000 population.... Most of the migrants were industrial laborers seeking refuge during the depression. A large number of these migrants are squatters and are past 45 years of age, and almost half of them are on relief.... There are today in the cut-over region whole communities that are simply stranded: potential migrants for the first opportunity that presents itself, but at present immobile because they have no place to go....

The present economic plight of the people in the northern Lake States, in my opinion, must be ascribed not so much to lack of natural resources as to the lack of opportunities for the large mass of the population, misdirected land-use policies of the past, and the feeble efforts of today to correct these policies.... Seventy percent of the entire volume of commercial timber in the cut-over region is in industrial or speculative ownership (this does not include the farm woods). Half of this is in the form of large private holdings of 10,000 acres or more, and is controlled by about 75 owners. Whoever controls these timber resources controls to a large extent the economic destiny of the region....

Sweden has a forest area of about 62 million acres - not very much larger than the forest area in the whole Lake States, which is about 55 million acres.... The Swedish forests, after more than a century of logging, are today producing 7 billion feet of lumber each year, and this yield is maintained and even increased from year to year; while in the Lake States, if the present destructive processes still go on, our 55 million acres soon will not be able to maintain an annual cut of even one billion feet.... In Sweden today, with a forest acreage not much greater than ours, there are employed some 400,000 men in cutting and transporting logs, and in the manufacture of lumber and pulp, as against 69,000 in the forest industries of the Lake States. Sweden, besides meeting all its own domestic needs, exports forest products to the value of $45,000,000 a year. The Lake States not only do not meet their own domestic needs, but import some lumber and large quantities of pulpwood and pulp.

Millions of tons of ore are shipped out from the region to be smelted somewhere in Pittsburgh or Cleveland. Suppose at least some of this iron ore were processed into pig iron and steel within the region itself. What new opportunities would be created for the employment of local labor! ....

It is possibly risky to encourage expansion of agriculture in the old conventional way - an individual farmer on a little piece of land struggling to make a living through his individual efforts, when even farmers on good land farther south have a hard time of it. With cooperative farming, however, on land leased from the Federal Government, States, or counties, with no mortgages facing the settlers, with machinery bought cooperatively, and cooperative marketing of the products, with part-time work in the woods, mills, or some other industries, a new chapter might be written in the agricultural development of the region.

The recreational industry could be given a new impetus if facilities were created for the low-income groups to enjoy the summer climate, the woods, the lakes, and the fresh air of the northern Lakes States region.... Most of all, however, the region needs some new industries utilizing the available raw materials.... The slashings left after logging which feed the forest fires could be converted into a source of readily utilizable fuel. The souvenirs made of wood and offered to the tourists, now coming largely from Japan, could and should be all manufactured in the region itself. Many useful articles could be made of local wood.... With splendid highways and highly developed trucking, it is hard to believe that some way could not be found by which this large supply of fuel could be made available to a large number of people in the towns and cities.... The possibilities of utilizing such species as aspen and jack pine in the manufacture of pulp, paper, and cellulose in general could be greatly increased, as well as utilization of these woods for construction purposes of all kinds.... Under favorable conditions, I cannot see why the cut-over region could not support a density of population similar to that of Sweden, Finland, and Norway, and that means a population of from 2 to 2½ million.

ARTICLES BY MEMBERS OF FOREST SERVICE APPEARING IN OUTSIDE PUBLICATIONS

Compiled by Washington Office Library

BEVAN, Arthur. The forest problem in Puerto Rico. Rev. de Agricultura, Industria y Comercio de Puerto Rico 32: 447-448. Sept. 1940.

BROUSE, Don. Some causes of warping in plywood and veneered products. illus. Wood Products 45(10): 23-29. Oct. 1940.

CUNO, J. B. Rosin barrel tests in the laboratory. Barrel and Box and Pkgs. 45(9): 11-12. Sept. 1940.

CURRAN, C. E. Hardwoods and the semi-chemical pulping process. Pulp & Paper Mag. Canad. 41: 665-668. Sept. 1940.

DAIGLE, Russell D. Forest fires are your enemy. Motor Land (Calif. State Auto Assoc.) 47(3): 6. Sept. 1940.

______They're your forests. Motor Land (Calif. State Auto. Assoc.) 47(2): 11. Aug. 1940.

DEMMON, E. L. Forest research and the southern lumber industry. Southern pine association. Conservation dept. Southern pine forestry notes. no. 68. May, 1940.

ELDREDGE, I. F. Hardwoods offer South industrial opportunity. illus. South. Lumber Jour. 44(10): 26,28. Oct. 10, 1940.

HAJNY, G. J. and G. J. RITTER. Conversion of holocellulose to pulp suitable for high-grade papers. Abstract. Pac. Pulp and Paper Indus. 14(8): 16. Sept. 1940.

HAMILTON, E. L. Experimental forest. South. Calif. Social Studies Rev. 16(5): 10, 12-14. Oct. 1940.

HARRIS, E. E. Hydrogenation of lignin. Abstract. Pac. Pulp and Paper Indus. 14(8): 16. Sept. 1940.

HOLDRIDGE, L. R. The possibility of close cooperation for mutual benefit between agriculture and forestry in the American tropics. Rev. de Agricultura, Industria y Comercio de Puerto Rico. 32: 457-460. Sept. 1940.

HORMAY, A. L. The effect of logging on forage. Chronica Botanica 6(1): 6-7. Oct. 7, 1940.

HOUGH, A. F. Tionesta area formally established. Forest Leaves 30(5) (Whole no. 300): 11. Sept.-Oct. 1940.

KIRKLAND, Burt P. Southern forest resources and industries. tables. South. Econ. Jour. 6(1): 20-32. July, 1939.

LODEWICK, J. E. Western hemlock, past, present and future. illus. Timberman 41(12): 36-42. Oct. 1940.

LOUGHBOROUGH, W. K. Chemical seasoning increases percentage of sound cuttings. Canada Lumberman 60(17): 19-20. Sept. 1, 1940.

MACDANIELS, E. H. Beating the beetles. Tractors and selective cutting are making possible new strategy in war with insects in the Pacific Northwest. illus. Amer. Forests 46: 506-508. Nov. 1940.

MARCH-MOUNT, Margaret. Shelterbelts may prevent "blackout" of midwest prairie-plains. illus. Ohio State Grange Mo. 43(10): 4-5. Oct. 1940.

MARKWARDT, L. J., and LUXFORD, R. F. Spring suspended spherical bearing block for compression tests. A.S.T.M. Bull. (105): 27-28. Aug. 1940.

MARTIN, J. S., and BRAY, M. W. Alkaline pulping of western white pine (Pinus monticola). Abstract. Pac. Pulp and Paper Indus. 14(8): 18. Sept. 1940.

MATTOON, W. R. Then and now--a quarter century of cooperative forestry extension in the Southern states--1914 to 1939. Naval Stores Rev. 50(27): 20-21. Oct. 5, 1940.

NEWLIN, J. A. How to anchor against storm damage. Amer. Builder 62(9): 45, 103. Sept. 1940.

SHOEMAKER, L. C. Hunting does. The year of the big snow. illus. Western Sportsman 5(5): 11, 19. Oct. 1940.

SHOW, S. B. Land use planning in our national forests. Calif. Conservationist 5(9): 10-11, 20. Sept. 1940.

SIEKER, John. National forest wilderness system. (Condensed). Conservation 6(5): 43-45. Sept.-Oct. 1940.

TIEMANN, H. D. Application of high frequency electrical fields to drying and gluing on wood. diagr. South. Lumberman 161(2029): 39-40. Oct. 15, 1940.

_______Drying lumber by high frequency electric fields. South. Lumberman 161(2027): 39-40. Sept. 15, 1940.

_______How to conduct a kiln-drying run: what to do, and a few short cuts. South. Lumberman 161(2025): 41-44. Aug. 15, 1940.

THE EDITOR DISCOVERS

A novel way of disposing of Christmas trees and evergreen decorations when the holidays are over has been devised by the City of Boulder, Colorado. It is described as follows in a publication issued by the U. S. Chamber of Commerce entitled "Christmas Events:"

"Another feature of our program which has proven to be quite popular is what we call our 'Twelfth Night Festival.' Right after New Year all the decorations are taken down and the evergreen is piled in the center of the baseball park. All the citizens are urged to place their old Christmas trees in the parking in front of their homes on one certain day and with the cooperation of the city and county officials, trucks are sent through the city gathering up all of this material. This is all stacked in the baseball field where, on the twelfth night after Christmas, a beautiful ceremony is held. At that time we again have a band, solos, the singing of Christmas carols, and the burning of the trees, the fire being lit by the Mayor. This gives us an official opening of the Christmas season and an official closing. The gathering up and burning of the trees also serves as a fire prevention activity, experience having shown that previous to the time this program was inaugurated, old trees, wreaths, stringers and evergreen were to be found stuck away in basements and attics throughout the city."

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In spite of bombs bursting over England, the "Men of the Trees" Society is carrying on its efforts to inspire men and women of England with a love of trees and forests and a desire to preserve them. Captain Richard St. Barke Baker, founder of the Society, writes that "We are making a supreme effort to continue 'Trees', our Journal." The lead article of the Oct., Nov., Dec., 1940 issue, entitled "Restore Our Woodlands Now", is a plea for rapid restoration of the million of trees being cut for war needs. The Society has issued a "Tree Lover's Calendar", which contains twelve original woodland studies made both in Great Britain and America and should be a welcome Christmas gift on both sides of the Atlantic. The price is $1.00 per copy. It can be obtained from headquarters of the Society at Manor Farm, Puncknoll, Dorset, England, or from The Calendar Secretary, Silverbeck, Churt, Nr. Farnham, Surrey, England. The journal also contains a description of a book by Captain Baker entitled "Trees - A Book of the Seasons." This book contains 48 studies of trees throughout the seasons of the year with original descriptions and poetic quotations. The price is $2.25 each. Copies may be obtained from the Society's headquarters.

Captain Baker and a group of British men and women made a tour of the United States during the summer of 1939, visiting several of the western National Forests.

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